Psychological Research, M.S.

COLLEGE OF LIBERAL ARTS

About the Program

The M.S. in Psychological Research is designed to provide a research-intensive experience, advanced coursework, and professional development to Temple University students completing their undergraduate degree in Psychology who intend to pursue doctoral studies in any of the academic psychology disciplines. Students in the 32-credit program work with a faculty sponsor to develop and carry out a master's project; complete graduate-level coursework in methodology, statistics, ethics, and topical seminars; and engage in professional development activities that prepare them for doctoral-level studies and enhance their applications to Ph.D. programs.

The M.S. in Psychological Research is separate and distinct from the Department of Psychology’s Ph.D. program and does not lead to entrance into the Psychology Ph.D. program. Prospective doctoral students must apply directly to the Ph.D. program.

Time Limit for Degree Completion: 2 years

Campus Location: Main

Full-Time/Part-Time Status: Full-time study is required.

Interdisciplinary Study: The program encourages interdisciplinary coursework.

Job Prospects: Graduates of the M.S. program in Psychological Research gain skills that enhance their applications to doctoral programs in academic psychology. Positions for individuals with an M.S. in Psychological Research are also available in a number of settings, including universities, private research and consulting organizations, non-profits, and marketing.

Non-Matriculated Student Policy: Master’s Directed Research courses, including PSY 5791 and PSY 5891, and 8000-level courses are not open to non-matriculated students. Permission of the instructor is required for non-matriculated students to take PSY 5003 Advanced Statistics and PSY 5104 Ethics and Ethical Conflicts in Psychological Science.

Financing Opportunities: Assistantships are not available for the M.S. program.

Admission Requirements and Deadlines

Application Deadline:

Fall: March 1

Applications are not evaluated until after the deadline has passed.

If you are currently an undergraduate student in Psychology at Temple University, APPLY ONLINE to this graduate program. The M.S. program in Psychological Research is open only as an accelerated 4+1 program for Psychology undergraduate students at Temple University. It is expected that the program will open to non-Temple students in the future, but that time frame has not yet been determined.

Next, visit https://www.cla.temple.edu/interfolio/psychological-research-ms to create or log in to your Interfolio account. Complete the supplemental program application and upload scanned copies of all supporting documents to your account, with these exceptions:

- Scores for the GRE and TOEFL, if applicable, must be reported directly by ETS to institution code 2906.
- Official electronic transcripts must be sent to vallens@temple.edu or the originals mailed to:

  Vanessa Allen-Smith, Graduate Coordinator
  Temple University College of Liberal Arts
  Dept. of Psychology
  1701 N. 13th Street, 653 Weiss Hall (265-67)
  Philadelphia, PA 19122-6085

Letters of Reference:

Number Required: 3

From Whom: Letters of recommendation should be obtained from college/university faculty members familiar with the applicant's academic competence.

Bachelor’s Degree in Discipline/Related Discipline: A baccalaureate degree (B.A., A.B., or B.S.) in Psychology is required. Additionally, a minimum GPA of 3.67 is required in both Psychology and overall for admissions consideration. Meeting the minimum does not, however, guarantee admission.
Statement of Goals: In approximately 500 to 1,000 words, state your reasons for pursuing a master’s degree, your current research interests, your research experience, and your future career goals.

Standardized Test Scores:
GRE: Required. Minimum scores are 150 verbal, 150 quantitative, and 4 in analytical writing.

Applicants who earned their baccalaureate degree from an institution where the language of instruction was other than English, with the exception of those who subsequently earned a master’s degree at a U.S. institution, must report scores for a standardized test of English that meet these minimums:

- TOEFL iBT: 105
- IELTS Academic: 7.0
- PTE Academic: 72

Writing Sample: An academic writing sample must be submitted. It is used to assess the applicant's ability to complete graduate-level written work and produce a high-quality master's project paper.

Program Requirements

General Program Requirements:
Number of Credits Required Beyond the Baccalaureate: 32

Required Courses:

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<tr>
<th>Year 1</th>
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<th>Credit Hours</th>
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<tbody>
<tr>
<td>Fall</td>
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<tr>
<td>PSY 5003</td>
<td>Advanced Statistics</td>
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<tr>
<td>PSY 5791</td>
<td>Master's Directed Research I</td>
<td>3</td>
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<td>Spring</td>
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<tr>
<td>PSY 5104</td>
<td>Ethics and Ethical Conflicts in Psychological Science</td>
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<td>PSY 5891</td>
<td>Master's Directed Research II</td>
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<td>Term Credit Hours</td>
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<td>Year 2</td>
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<tr>
<td>Fall</td>
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<tr>
<td>PSY 8015</td>
<td>Teaching of Psychology</td>
<td>1</td>
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<td>PSY 8016</td>
<td>Professional Development Seminar</td>
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<td>PSY 9991</td>
<td>Research</td>
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<td>8000-level Statistics or Methodology course</td>
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<td>PSY 9991</td>
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<td>8000-level Topical Seminar</td>
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<td>Total Credit Hours</td>
<td>32</td>
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¹ The elective must be a graduate course at the 5000 to 8000 level, but may be taken from any school or college.

Other: M.S. students are exposed to a broad range of current research by attending the department’s Colloquium and TILES lecture series to hear talks by distinguished researchers from other universities. They are also required to participate in lab meetings and journal clubs, and to attend regular advising meetings to select and apply to appropriate doctoral programs. Students who postpone application to doctoral programs receive guidance for a master’s level job search and applications.

Culminating Event:
Master's Project:
A four-course sequence of directed research immerses the student in carefully planned and executed research, culminating in a publishable paper. Throughout the sequence, students are expected to participate in and contribute to the advisor’s program of research. Activities include data analyses, literature reviews, programming experiments, and/or recruitment. During the first term, students work with their advisors to develop a research proposal and analysis plan for the master’s project; a protocol is submitted to the Institutional Review Board (IRB) for approval. Students become familiar with the methods, measures, and apparatus in the advisor’s lab. During the second term, students begin data collection for the master’s project and start work
on a comprehensive literature review. The third term focuses on continued data collection, preliminary analyses, completion of the literature review, and a possible poster submission. During the fourth term, data collection, cleaning, and analyses are completed, and the results are written up in an APA manuscript.

All students complete the master’s project and submit their research for publication and/or presentation at a conference. Students who do not complete the final project requirement by the end of the Spring term of Year 2 may register for additional research credits in the Summer term and submit their master’s project no later than July 15 to be eligible for August graduation.

Contacts

Program Web Address:
https://www.cla.temple.edu/psychology/undergraduate/#psychology-5-year-masters-program-1

Department Information:
Dept. of Psychology
653 Weiss Hall
1701 N. 13th Street
Philadelphia, PA 19122-6085
pshapiro@temple.edu
215-204-7321

Submission Address for Application Materials:
https://www.cla.temple.edu/interfolio/psychological-research-ms

Submission Address for Official Electronic Transcripts:
vallens@temple.edu

Submission Address for Official Paper Transcripts:
Vanessa Allen-Smith, Graduate Coordinator
Temple University Dept. of Psychology
1701 N. 13th Street, 653 Weiss Hall (265-67)
Philadelphia, PA 19122-6085

Department Contacts:
Admissions:
Pamela Shapiro
pshapiro@temple.edu
215-204-7310

Director of Graduate Studies:
Dr. Deborah Drabick
deborah.drabick@temple.edu
215-204-0957

Chairperson:
Dr. Peter Marshall
peter.marshall@temple.edu
215-204-7630

Courses

PSY 5003. Advanced Statistics. 3 Credit Hours.
This course is primarily meant to prepare master's-level psychology students to conduct statistical analyses on data related to their research, and to prepare them for more advanced courses, such as multivariate statistics (PSY 8031). Topics will include linear regression, repeated-measures ANOVA, multi-factorial ANOVA, and several nonparametric alternatives to 'standard' inferential tests. In addition to significance testing, this course will focus on the measurement and interpretation of effect size and power. Students will also learn how to perform data analysis using the SPSS statistical software package.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.
PSY 5100. Topics: Brain, Behavior and Cognition. 3 Credit Hours.
This graduate course is to be offered for graduate students interested in the topical course designated PSY 3100 but wish to work with the instructor to earn graduate credit.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 5103. Learning and Behavior Analysis. 3 Credit Hours.
A systematic introduction to the principles of behavior analysis with emphasis on their application as well as their origins in basic research.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

PSY 5104. Ethics and Ethical Conflicts in Psychological Science. 3 Credit Hours.
Psychologists are bound by an official code of conduct that includes general ethical principles, as well as specific enforceable standards for ethical conduct in research, education and training, public service, and clinical practice. This course will use a case study approach with fine-grained analyses of ethical conflicts to learn and understand the ethical standards set forth in the American Psychological Association's *Ethical Principles of Psychologists and Code of Conduct* (APA, 2010). We will consider both historical and recent cases of ethical misconduct in research, the concept of evidence-based treatment, and newly emerging ethical dilemmas in the field of cognitive neuroscience and imaging. Case studies and discussions will include ethical conduct relevant for graduate students.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
(PSY 5791|Minimum Grade of B|May not be taken concurrently)
AND (PSY 5891|Minimum Grade of B|May not be taken concurrently)

PSY 5151. Motivation. 3 Credit Hours.
The course entails hands-on experience in the shaping of behavior through differential reinforcement, several field trips to sites where behavioral principles provide the basis for serving individuals with special needs (e.g., closed-head injury, autism, aggressive, and self-injurious behavior), as well as individual projects on behavior of personal concern to the course participants.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

PSY 5791. Master's Directed Research I. 1 to 4 Credit Hour.
This course is open to students in the first year of the Master of Science in Psychological Research program.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 5891. Master's Directed Research II. 1 to 4 Credit Hour.
This course is open to students in the first year of the Master of Science in Psychological Research program.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 8005. Affective Neuroscience. 3 Credit Hours.
The brain is not just a thinking machine; it is also a feeling machine. This course explores the neural substrates behind emotions such as love, trust, fear, and pleasure. We will also discuss the relationship between emotions and cognition, the effect of emotions on animal and human behavior, and the biological basis of affective disorders such as anxiety and depression.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.
PSY 8011. Graduate Statistics I. 3 Credit Hours.
Review of hypothesis-testing methods for means, variances, correlations, and proportions. One-way ANOVA for completely randomized, blocked, and repeated measure designs. Planned and post hoc multiple comparisons.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

PSY 8012. Core Course in History and Systems of Psychology. 3 Credit Hours.
An historical and conceptual analysis of the principle ideas and movements that have contributed to fundamental theoretical and methodological features of contemporary psychology.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

PSY 8015. Teaching of Psychology. 0 to 1 Credit Hours.
Required of all graduate teaching assistants during their first semester of teaching. Designed to assist and prepare them for their teaching duties. Supervision and feedback are used to promote effective communication and teaching skills.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

PSY 8016. Professional Development Seminar. 2 Credit Hours.
This course is taken concurrently with PSY 8015, the Professional Development Seminar Series (PDS). The course will provide in-depth coverage of issues introduced at PDS seminars and roundtables, along with supporting activities and discussions relevant to students working towards the MS degree in Psychological Research. Students engage in structured written exercises that reinforce necessary professional skills, including preparation of CVs, abstracts for conference presentations, peer review of manuscripts, and grant writing. The major project in this course will be preparation of a draft for a National Science Foundation Graduate Research Fellowship application.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Co-requisites:** PSY 8015.

**Repeatability:** This course may not be repeated for additional credits.

**Pre-requisites:**
(PSY 5003|Minimum Grade of B|May not be taken concurrently)
AND (PSY 5791|Minimum Grade of B|May not be taken concurrently)
AND (PSY 5891|Minimum Grade of B|May not be taken concurrently)

PSY 8017. Professional Issues for Psychology Careers. 0 or 1 Credit Hours.
This course provides first-year Psychology PhD students and 4+1 Psychology students in their Masters year with an introduction to graduate school and to the profession of psychology. It comprises the first half of a one-year sequence in professional development. The full sequence includes this course each Fall and Teaching of Psychology (PSY 8015) that is offered each Spring semester. These courses are designed to provide graduate students with information that most faculty have learned only through direct (and not always successful!) experiences. Academic psychology has both explicit and implicit (i.e., tacit) knowledge and rules that underlie the success of individuals in the system. The formalized rules and knowledge are available and relatively easy to acquire; the tacit knowledge is harder to discern and, thus, to acquire. Graduate advisors mentor students to prepare them for successful postgraduate careers, and each program in the department emphasizes the development of particular skills. However, some topics are better addressed through a class environment. By helping to demystify the academic path, this course will place the preparation for successful post-graduate careers at the beginning, rather than the end, of our graduate program.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

PSY 8021. Graduate Statistics II. 3 Credit Hours.
Multiway ANOVA for completely randomized and repeated measures, nested designs, covariance designs. Simple effects and planned and post hoc comparisons. Use of available statistical computer programs.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**Pre-requisites:**
PSY 8011|Minimum Grade of B|May not be taken concurrently.
PSY 8031. Survey of Multivariate Techniques. 3 Credit Hours.
Beginning with bivariate correlation and regression, generalizations are made, through the aid of matrix algebra, to multiple regression and correlation. Multivariate techniques also include principal components, canonical correlation, and multivariate analysis of variance use of available statistical programs.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
PSY 8011|May not be taken concurrently.

PSY 8032. Structural Equation Modeling. 3 Credit Hours.
This graduate course overviews the application of structural equation modeling to various analysis problems confronted throughout the social, behavioral, and health sciences. Topics will include confirmatory factor analysis, measurement and structural models, path analysis, mediation, latent growth modeling, assessing model fit, and implementation of methods in statistical software.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
PSY 8021|May not be taken concurrently.

PSY 8033. Hierarchical Linear Modeling. 3 Credit Hours.
Usually, this takes the form of individuals nested in bounded social organizations (e.g., students nested in schools or residents nested in neighborhoods), speaking to issues of social influence that the social sciences endeavor to address. This course will introduce students to HLM techniques, with a focus on practical applications of HLM. The course will focus on HLM applications to single continuous outcomes—analyzing the effects of context on individual outcomes and analyzing longitudinal data. HLM for binary outcomes and multivariate situations (multiple dependent variables) and (time allowing) HLM for cross-nested designs will also be covered.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
PSY 8021|May not be taken concurrently.

PSY 8041. Factor Analysis and Scaling. 3 Credit Hours.
Factor analysis covers exploratory and confirmatory methods, estimation procedures, factor transformations, as well as extensions and applications of the factor model. Scaling covers the laws of comparative and categorical judgment, goodness-of-fit tests, metric and nonmetric multidimensional scaling, and clustering methods.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
PSY 8031|May not be taken concurrently.

PSY 8051. Focused Analysis of Research Data. 3 Credit Hours.
An examination of focused methods of primary and secondary data analysis, taught within the conceptual framework of meta-analysis. Particular emphasis is given to the use of contrasts, indices of effect size, confidence intervals, simple graphical methods, etc., in confirmatory and exploratory data analysis.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
(PSY 8011|May not be taken concurrently
AND PSY 8021|May not be taken concurrently)
PSY 8110. Topical Seminars in Experimental Psychology. 3 Credit Hours.
Examination of different topics within experimental psychology, varied from semester to semester.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 8120. Topical Seminars in Experimental Psychology. 3 Credit Hours.
Examination of different topics within experimental psychology, varied from semester to semester.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 8130. Topical Seminars in Physiological Psychology. 3 Credit Hours.
Topics vary from semester to semester.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 8210. Topical Seminars in Learning. 3 Credit Hours.
Topics vary from semester to semester.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 8212. Core Course in Learning and Behavioral Analysis. 3 Credit Hours.
An examination of the fundamental concepts in learning and behavioral analysis.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

PSY 8310. Topical Seminar in Cognitive Psychology. 3 Credit Hours.
Topics vary from semester to semester. Students may repeat this course.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 8312. Core Course in Cognitive Psychology. 3 Credit Hours.
Review of theory and research in the areas of memory, language, and thinking.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

PSY 8410. Multicultural Issues in Clinical Psychology. 3 Credit Hours.
Topics such as depression, sexuality, neuropsychology, death and dying, stress, impulsivity, specialized treatment approaches, and others are varied from semester to semester according to programmatic needs.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 8411. Cognitive-Behavioral Therapies. 3 Credit Hours.
Surveys cognitive-behavioral approaches to the treatment of the major classes of mental, behavioral and emotional disorders. Emphasis is placed on cognitive-behavioral models and case formulation as well as empirical evaluation of the relevant cognitive-behavioral treatment outcome literature.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.
PSY 8412. Core Course in Psychopathology. 3 Credit Hours.
The course will review concepts, theory, and research in psychopathology. Behavioral, cognitive, interpersonal, psychodynamic, sociocultural, genetic, and biological/neuroscience aspects of psychopathology will be covered as appropriate, depending on the disorder. The course will emphasize descriptive psychopathology (e.g., phenomenology, epidemiology, course of disorder) and issues of etiology, rather than treatment, although some work on treatment will also be discussed. The major goals of the course are knowledge of the nature of various mental disorders and what is known about their causes and risk factors, an appreciation of important issues in psychopathology, and development of the ability to think clearly and critically about these issues.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

PSY 8413. Psychological Assessment I. 3 Credit Hours.
A year-long course; surveys concepts of intelligence and teaches the administration, scoring, and interpretation of individually administered tests. The evaluation of learning disabilities and neuropsychological disorders is also covered. Surveys the diagnostic system of mental disorders. Teaches the administration, scoring, and interpretation of projective tests and other procedures used to identify and understand clinical dynamics.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

PSY 8420. Topical Seminars in Clinical Psychology. 3 Credit Hours.
Topics such as depression, sexuality, neuropsychology, death and dying, stress, impulsivity, specialized treatment approaches, and others are varied from semester to semester according to programmatic needs.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 8423. Psychological Assessment II. 3 Credit Hours.
A year-long course; surveys concepts of intelligence and teaches the administration, scoring, and interpretation of individually administered tests. The evaluation of learning disabilities and neuropsychological disorders is also covered. Surveys the diagnostic system of mental disorders. Teaches the administration, scoring, and interpretation of projective tests and other procedures used to identify and understand clinical dynamics.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

PSY 8430. Topical Seminars in Clinical Psychology IV. 3 Credit Hours.
Topics such as depression, sexuality, neuropsychology, death and dying, stress, impulsivity, specialized treatment approaches, and others are varied from semester to semester according to programmatic needs.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 8433. Clinical Psychology: Scientific and Professional Dimensions. 3 Credit Hours.
History, ethics, research and service methodologies, psychometrics, and topical discussions pertinent to the relationships between psychological science and the practice of clinical psychology.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

PSY 8453. Personality and Psychotherapy. 3 Credit Hours.
An examination of Freudian/Modern psychoanalytic and existential theories and their application to personality, psychopathology and treatment.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.
PSY 8481. Social, Cognitive, and Developmental Aspects of Behavior. 3 Credit Hours.
This is a general graduate level survey course that will include three 5-week evaluated education experiences (EEE's) focusing on each of (a) social aspects of behavior (b) cognitive aspects of behavior and (c) developmental aspects of behavior. The social EEE will include topics such as group processes, attributions, discrimination and attitudes. The developmental EEE will include topics such as transitions, growth, and development across an individual's life. The cognitive EEE will include topics such as learning, memory, thought processes, and decision-making. As a part of each EEE, students will be assigned primary readings of classic articles in the area as well as recent research findings. This course is designed to meet the American Psychological Association requirements for discipline specific knowledge in social, cognitive, and developmental aspects of behavior.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

PSY 8510. Topical Seminar in Developmental Psychology I to IV. 3 Credit Hours.
In different semesters these courses focus on topics such as aging, adolescence, infancy, language development, learning and memory development, perceptual development, and theories of development.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 8512. Core Course in Developmental Psychology. 3 Credit Hours.
Consideration of theories and related research on human development.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

PSY 8513. Cognitive Development. 3 Credit Hours.
Theories of cognitive development (including Piaget, Werner, information processing) and exploration of issues and research generated by these theories. Includes consideration of sensory-motor, perceptual, language, memory, and conceptual development.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
PSY 8512|May not be taken concurrently.

PSY 8610. Topical Seminar in Organizational-Social. 3 Credit Hours.
Topics selected depend on the current emphasis in the field and interests of the students. A student may repeat this course.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 8612. Core Course in Social Psychology. 3 Credit Hours.
A survey of theoretical foundations and the substantive and methodological issues of social psychology.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

PSY 8613. Advanced Social Psychology. 3 Credit Hours.
Topics selected depend on the current emphases in the field and interests of the students. A student may repeat this course.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 8712. Core Course in Behavioral Neuroscience. 3 Credit Hours.
An examination of brain-behavior relationships in the context of evolution.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.
PSY 9183. Readings in Psychology. 3 Credit Hours.
A post-master's advanced tutorial course.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may be repeated for additional credit.

PSY 9187. Clinical Practicum. 3 Credit Hours.
Under the auspices of the Psychological Services Center, students work with a different faculty member for each of four semesters. Each semester will emphasize either a different client population or a different orientation to the assessment and treatment of child, family, and adult disorders. Faculty assignments and the focus of group supervision vary from semester to semester.

**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Psychology.
**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may be repeated for additional credit.

PSY 9283. Readings in Psychology. 1 to 3 Credit Hour.
A post-master's advanced tutorial course.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may be repeated for additional credit.

PSY 9287. Clinical Practicum. 3 Credit Hours.
Under the auspices of the Psychological Services Center, students work with a different faculty member for each of four semesters. Each semester will emphasize either a different client population or a different orientation to the assessment and treatment of child, family, and adult disorders. Faculty assignments and the focus of group supervision vary from semester to semester.

**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Psychology.
**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may be repeated for additional credit.

PSY 9387. Clinical Practicum. 3 Credit Hours.
Under the auspices of the Psychological Services Center, students work with a different faculty member for each of four semesters. Each semester will emphasize either a different client population or a different orientation to the assessment and treatment of child, family, and adult disorders. Faculty assignments and the focus of group supervision vary from semester to semester.

**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Psychology.
**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may be repeated for additional credit.

PSY 9411. Clinical Research Methodology. 3 Credit Hours.
Focusses on design issues and major methodological problems in research on such topics as psychotherapy outcome, characteristics of diagnostic groups, and stress in families. Particular attention is given to internal and external validity threats, advantages and disadvantages of assessment methods, principles of test construction, challenges and alternatives to traditional research methods, single subject designs, and approaches to integrating clinical research and practice.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

PSY 9485. Ph.D. Internship Course. 1 to 6 Credit Hour.
For clinical students only who are on internship.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may be repeated for additional credit.
PSY 9487. Clinical Practicum. 3 Credit Hours.
Under the auspices of the Psychological Services Center, students work with a different faculty member for each of four semesters. Each semester will emphasize either a different client population or a different orientation to the assessment and treatment of child, family, and adult disorders. Faculty assignments and the focus of group supervision vary from semester to semester.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 9587. Clinical Practicum. 3 Credit Hours.
Under the auspices of the Psychological Services Center, students work with a different faculty member for each of four semesters. Each semester will emphasize either a different client population or a different orientation to the assessment and treatment of child, family, and adult disorders. Faculty assignments and the focus of group supervision vary from semester to semester.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 9987. Assessment Practicum. 3 Credit Hours.
The assessment practicum is designed to provide clinical students in-depth training in comprehensive psychological/neuropsychological assessment. Under the auspices of the Psychological Services Center, students work with a faculty member who is a licensed psychologist for two semesters conducting psychological assessments. Integration of test results and other sources of information (e.g., interview, medical history, informant reports, etc.) will be emphasized. Additionally, the assessment practicum will focus on generating recommendations based on the psychological/neuropsychological assessment and communicating results to clients and referral sources.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(PSY 8413|Minimum Grade of B-|May not be taken concurrently)
AND (PSY 8423|Minimum Grade of B-|May not be taken concurrently)

PSY 9991. Research. 1 to 6 Credit Hour.
Intended to meet the needs of students who desire to carry on an individual investigation while working for the master's degree.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 9994. Preliminary Examination Preparation. 1 to 6 Credit Hour.
Preparation for the preliminary examination.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 9998. Pre-Dissertation Research. 1 to 6 Credit Hour.
Independent research for the dissertation proposal. Registration each semester required until approval and elevation to candidacy.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

PSY 9999. Ph.D. Dissertation Research. 1 to 6 Credit Hour.
After passing the preliminary examinations and having an approved proposal, Ph.D. students must register each semester for this course until the completion of the dissertation.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Dissertation Writing Student.

Repeatability: This course may be repeated for additional credit.