Scientific Writing, P.S.M.

COLLEGE OF SCIENCE AND TECHNOLOGY (http://cst.temple.edu)

About the Program

In science, the ability to write clearly and succinctly is a skill in demand by organizations as diverse as non-profit organizations, pharmaceutical companies, and news outlets. The primary objective of the P.S.M. in Scientific Writing program is to enable students with diverse backgrounds in science, technology, engineering, and mathematics (STEM) to develop the expertise to pursue medical and scientific writing jobs in the STEM fields. In addition, individuals currently employed in STEM areas are offered the opportunity to enhance and broaden their skills for their professional advancement. The Scientific Writing P.S.M. program offers specific and focused instruction in a wide range of scientific writing genres, as well as enables students to develop their communication skills. Students also experience scientific writing in practice, both through classroom instruction and an internship that provides an opportunity for direct training by directors of regulatory affairs in pharmaceutical companies, medical writers, practicing scientists, professionals working for scientific/medical journals, publishers, and the like. The program is a collaborative effort of Temple faculty in the College of Science and Technology and the Lew Klein College of Media and Communication. Students may satisfy the degree requirements by also taking electives in Engineering, English, Health Policy and Management, Marketing, Pharmacy Quality Assurance, Philosophy, and Statistics.

Time Limit for Degree Completion: 3 years

Campus Location: Main

Full-Time/Part-Time Status: The degree program can be completed on a full- or part-time basis.

Interdisciplinary Study: The degree program is inherently interdisciplinary in commingling science coursework with writing coursework.

Accreditation: Temple University is fully accredited by the Middle States Commission on Higher Education.

Areas of Specialization: The Scientific Writing P.S.M. program offers two concentrations:

• Marketing/Regulatory Writing
• Popular Scientific Writing

Job Prospects: Recent data from the United States Labor Department, Bureau of Labor Statistics, shows that technical writer jobs are growing at a faster rate than medical scientist jobs. Graduates of the Scientific Writing P.S.M. program are prepared to use scientific writing skills in all relevant areas, including the STEM disciplines, Contract Research Organizations (CRO), public health and policy, and science communications.

Non-Matriculated Student Policy: Non-matriculated students may enroll in a total of three courses (9 credits) with permission of the instructor and the Biology Department.

Financing Opportunities: Financial assistance in the form of Research or Teaching Assistantships is not offered at this time.

Admission Requirements and Deadlines

The new P.S.M. in Scientific Writing will be offered beginning Fall 2017.

Application Deadline:

Fall 2017 only: July 1; June 1 international
Fall 2018 and beyond: March 1; December 15 international

Spring: November 1; September 1 international

Applications are processed on a continual basis. Ordinarily, the applicant is informed of an admissions decision within four to six weeks of receipt of all supporting application documents. Late applications may be considered for admission.

APPLY ONLINE to this graduate program.

Letters of Reference:

Number Required: 3

From Whom: Letters should be obtained from college/university faculty or faculty who are familiar with the applicant's competency. If the applicant has an established career in a related field, the applicant's immediate supervisor should provide one of the letters.

Coursework Required for Admission Consideration: Applicants should have a strong background in one or more STEM fields: Science, Technology, Engineering, and Mathematics.
**Bachelor’s Degree in Discipline/Related Discipline:** The Scientific Writing P.S.M. program has been designed for professionals who have a bachelor's degree or equivalent in a STEM field.

**Statement of Goals:** In approximately 500 to 1,000 words, specify your interest in the Scientific Writing P.S.M. program, your career goals, and your academic and professional achievements.

**Standardized Test Scores:**
GRE: Optional. If scores are submitted, a combined minimum score of 305 on the quantitative and verbal reasoning sections is expected.

TOEFL: 90 iBT or 575 PBT minimum

**Interview:** An in-person or SKYPE interview is required.

**Transfer Credit:** Graduate credits from an accredited institution may be transferred into the Scientific Writing P.S.M. program. The credits must be equivalent to coursework offered by the Biology Department at Temple University. A grade of "B" or better must have been earned for the credits to transfer. The P.S.M. in Scientific Writing Steering Committee makes recommendations to the Department Chair for transferring credit on an individual basis. The maximum number of credits a student may transfer is 6.

**Program Requirements**

**General Program Requirements:**

**Number of Credits Required Beyond the Baccalaureate:** 30

**Required Courses:**

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Description</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOL 5505</td>
<td>Ethics Regulation and Policy in Biotechnology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 5522</td>
<td>Introduction to Scientific and Regulatory Writing</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 5532</td>
<td>Introduction to Grant Writing</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 5533</td>
<td>Communicating Science to a Broader Audience / Non-Scientists</td>
<td>3</td>
</tr>
<tr>
<td>JRN 5002</td>
<td>Reporting and Writing I</td>
<td>4</td>
</tr>
</tbody>
</table>

**Electives**

12

**Capstone Course**

| BIOL 9995 | Capstone Research Experience | 2 |

Total Credit Hours: 30

1 Electives may be selected in one of two areas of concentration, as delineated below, or drawn from any scientific STEM discipline. The latter allows students to choose from a wide spectrum of topics but to concentrate in any one field that is their professional interest and ensures that they are exposed to the diverse writing currently being done in the sciences. Any graduate-level course offered by the College of Science and Technology is acceptable as an elective, and students may petition the P.S.M. Program Director to include graduate-level courses taught at Temple in a related scientific area. Currently approved electives are identified below:

**Marketing/Regulatory Writing Concentration**

Select from the following courses:

| QARA 5502 | Regulation of Medical Devices: Submissions |
| QARA 5533 | Requirements for Product Labeling and Advertising |
| QARA 5534 | Regulatory Aspects of Biomedical/Technical Communication |
| QARA 5545 | Post Approval Changes (PAC) |
| QARA 5548 | Risk Management of Pharmaceutical and Medical Devices |
| QARA 5592 | Food and Drug Law |
| QARA 5594 | Regulation of Dietary Supplements, Botanicals, and Nutraceuticals |
| QARA 5596 | Food Labeling and Regulatory Affairs |
| QARA 5611 | Regulation of Advertising and Promotions |

Total Credit Hours: 12

**Popular Scientific Writing Concentration**

Select from the following courses:

| ENG 9400 | Seminar in Rhetoric and Composition |
| JRN 5003 | Editing the News I |

Total Credit Hours: 12
JRN 5005  Communication Law
JRN 5012  Reporting and Writing II
JRN 5013  Editing the News II
JRN 5151  Literary Writing in Journalism
JRN 5212  The Entrepreneurial Journalist
MSP 8741  Cybermedia Workshop

Total Credit Hours 12

Other Approved Electives

Select from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>BIOL 5111</td>
<td>Genomics in Medicine</td>
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<tr>
<td>BIOL 5312</td>
<td>Biostatistics</td>
</tr>
<tr>
<td>CHEM 5304</td>
<td>Nanomaterials Chemistry and Physics</td>
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<tr>
<td>CHEM 5505</td>
<td>Advanced Polymer Structure and Properties</td>
</tr>
<tr>
<td>CHEM 8201</td>
<td>The Chemistry of Natural Products</td>
</tr>
<tr>
<td>ENG 8706</td>
<td>Advanced Study in Rhetoric and Composition</td>
</tr>
<tr>
<td>EPBI 5101</td>
<td>Fundamentals of Epidemiology</td>
</tr>
<tr>
<td>HPM 8008</td>
<td>Health Economics</td>
</tr>
<tr>
<td>HPM 8013</td>
<td>Research Methods in Health Policy</td>
</tr>
<tr>
<td>HRPR 8101</td>
<td>Bioethics and Ethical Decision-Making</td>
</tr>
<tr>
<td>MKTG 5001</td>
<td>Marketing Management/Strategy</td>
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<tr>
<td>PHIL 5216</td>
<td>Philosophy of Science</td>
</tr>
<tr>
<td>PHIL 5249</td>
<td>Ethics in Medicine</td>
</tr>
<tr>
<td>STAT 5001</td>
<td>Quantitative Methods for Business</td>
</tr>
</tbody>
</table>

Total Credit Hours 12

Additional Requirements:

All graduate-level courses must be passed with a "B-" or better.

Attendance at scheduled departmental colloquia is required.

Culminating Events:

Capstone Project:

BIOL 9995 Capstone Research Experience constitutes a culminating event of the Scientific Writing P.S.M. and requires the submission of a detailed technical paper and oral presentation. In the summer following the first year of study, students are expected to complete an internship, which becomes part of their capstone project. The internship must take place in a workplace approved by the P.S.M. Steering Committee, which includes faculty from the College of Science and Technology, Lew Klein College of Media and Communication, and the Provost's Office. Workplaces may include a patent law office specializing in chemical, engineering, and scientific innovation; a practicing scientist; a publishing company; or any other relevant workplace on or off Temple's campus.

Contacts

Program Web Address:

https://cst.temple.edu/academics/graduate-programs

Department Information:

Dept. of Biology
255 Biology-Life Sciences Building
1900 N. 12th Street
Philadelphia, PA 19122-6078
karen.palter@temple.edu
215-204-5588

Mailing Address for Application Materials:

P.S.M. in Scientific Writing Program
340 Carnell Hall (041-03)
1803 N. Broad Street
Philadelphia, PA 19122-6104

Mailing Address for Application Materials from International Applicants:
P.S.M. in Scientific Writing Program
ATTN: Jason Pfeffer
1803 N. Broad Street, 340 Carnell Hall (041-03)
Philadelphia, PA 19122-6104
jpfeffer@temple.edu
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