

Scientific Writing PSM

COLLEGE OF SCIENCE AND TECHNOLOGY

Learn more about the Professional Science Master's in Scientific Writing.

About the Program

In science, the ability to write clearly and succinctly is a skill in demand by organizations as diverse as nonprofit organizations, pharmaceutical companies and news outlets. The primary objective of the PSM 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 PSM 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 PSM 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 PSM 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

Application Deadline:

Fall Priority Deadline: March 1; December 15 international

Spring Priority Deadline: October 30; September 1 international

Applications submitted after the priority deadline will be considered for admission on a rolling basis. 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.

APPLY ONLINE to this graduate program.

Letters of Reference:

Number Required: 2

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 PSM 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, describe your interest in the Scientific Writing PSM program, career goals, and academic and professional achievements.

Standardized Test Scores:

GRE: Optional

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: 90
- IELTS Academic: 6.5
- PTE Academic: 61
- Duolingo: 110

Resume: Current resume required.

Interview: An in-person or Skype interview is required.

Transfer Credit: Graduate credits from an accredited institution may be transferred into the Scientific Writing PSM 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 PSM 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:

Code	Title	Credit Hours
Core Courses		
BIOL 5505	Ethics Regulation and Policy in Biotechnology ¹	3
BIOL 5522	Introduction to Scientific and Regulatory Writing ¹	3
BIOL 5532	Introduction to Grant Writing ¹	3
BIOL 5533	Communicating Science to a Broader Audience / Non-Scientists ¹	3
JRN 5710	Seminars in Communication ^{1,2}	4
Electives ³		12
Capstone Course		
BIOL 9995	Capstone Project	2
Total Credit Hours		30

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With approval from the advisor, students may request to waive any one core course and replace it with an alternate course that aligns with the goals of the degree program.

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With approval from the advisor, students may take a graduate-level Journalism course other than JRN 5710.

3

Electives are selected in one of two areas of concentration, as delineated below. Students are required to take two STEM courses in the concentration of their choice and may take up to two non-STEM courses that align with their interests. The coursework allows students to choose from a wide range of topics within Marketing/Regulatory Writing or Popular Scientific Writing in alignment with their professional interests. The breadth of electives ensures that students are presented with the diverse scientific writing genres in science. Listed electives for each concentration serve as a guide. Thus, students are not restricted to the listed electives and may, in consultation with the program advisor, take other graduate-level courses as electives.

Marketing/Regulatory Writing Concentration

Code	Title	Credit Hours
Select four from the following: ¹		12
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 and Functional Foods	
QARA 5596	Food Labeling and Regulatory Affairs	
QARA 5611	Regulation of Advertising and Promotions	
Total Credit Hours		12

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Students in the Marketing/Regulatory Writing concentration must take two QARA courses, but may elect to replace two courses with any two graduate-level courses offered at Temple that align with the Marketing/Regulatory Writing concentration.

Popular Scientific Writing Concentration

Code	Title	Credit Hours
Select four from the following: ¹		12
BIOL 5111	Genomics in Medicine	
BIOL 5312	Biostatistics	
BIOL 82X0	Seminar in Genomics Analytics	
CHEM 8201	The Chemistry of Natural Products	
ENG 9400	Seminar in Rhetoric and Composition	
HPM 8008	Health Economics	
JRN 5005	Communication Law	
JRN 5012		
JRN 5013		
JRN 5212	The Entrepreneurial Journalist	
MSP 8741	Emergent Media Production	
PHIL 5216	Philosophy of Science	
PHIL 5249	Ethics in Medicine	
STAT 5001	Quantitative Methods for Business	
Total Credit Hours		12

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Students in the Popular Scientific Writing concentration may take any two STEM courses and any two non-STEM graduate-level courses offered at Temple that align with their interests. The list below serves as a guide for electives within the Popular Scientific Writing concentration.

Approved Electives for the Popular Scientific Writing Concentration ¹

Code	Title	Credit Hours
ENG 8706	Advanced Study in Rhetoric and Composition	3
EPBI 5101	Fundamentals of Epidemiology	3
HPM 8013	Research Methods in Health Policy	3
HRPR 8101	Bioethics and Ethical Decision-Making	3
MKTG 5001	Marketing Management/Strategy	3

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With approval from the advisor, students may take one of these approved electives or any other graduate-level course as an elective to replace one course for the Popular Scientific Writing concentration.

Culminating Event:

Capstone Project:

BIOL 9995 Capstone Project constitutes a culminating event of the Scientific Writing PSM 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 PSM 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://www.temple.edu/academics/degree-programs/scientific-writing-psm-st-scwr-psm>

Department Information:

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

Submission Address for Application Materials:

<https://cst.temple.edu/academics/graduate-programs/apply-now>

Department Contacts:

Program Coordinators:

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