

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 up to 500 words, explain your interest in this specific program and what career goals you have. Describe your work and academic experiences with specific mentions of internships, course projects, or research. Share any other relevant information that you feel should be taken into consideration.

Transcripts: Unofficial transcripts are considered at the time of applying. Official transcripts are required when accepting the offer at the time of deposit. Official transcripts can be sent to cst.gi@temple.edu

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: May be required on a case-by-case basis.

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 ^{1,2}	3
BIOL 5533	Communicating Science to a Broader Audience / Non-Scientists ¹	3
STAT 5602	Visualization: The Art of Numbers and the Psychology of Persuasion ^{1,2}	3
Electives ³		
Select four electives from one or more areas of interest below. Students may also select courses that are not listed with approval from the program director.		12
Recommended for Regulatory Writing		
BIOL 5111	Genomics in Medicine	
BIOL 5312	Biostatistics	
EPBI 5101	Fundamentals of Epidemiology	
HPM 8008	Health Economics	
QARA 5514	Regulatory eSubmissions	
QARA 5533	Requirements for Product Labeling and Advertising	
QARA 5544	Regulatory Intelligence	
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 5611	Regulation of Advertising and Promotions	
Recommended for Medical Communication		
BIOL 5111	Genomics in Medicine	
BIOL 5312	Biostatistics	
EPBI 5101	Fundamentals of Epidemiology	
EPBI 8307	Systematic Reviews	
MKTG 5001	Marketing Management/Strategy	
HPM 8008	Health Economics	
HPM 8013	Research Methods in Health Policy	
MSP 5114	Communication Research Methods	
QARA 5533	Requirements for Product Labeling and Advertising	
QARA 5544	Regulatory Intelligence	
QARA 5592	Food and Drug Law	
QARA 5611	Regulation of Advertising and Promotions	
QARA 5545	Post Approval Changes (PAC)	
SBS 8105	Health Communication	
Recommended for Popular Science Writing		
BIOL 5111	Genomics in Medicine	
BIOL 5312	Biostatistics	
CMGT 5202	Storytelling through Innovation	
CMGT 8101	Data Driven Insights	
EPBI 5101	Fundamentals of Epidemiology	
HPM 8008	Health Economics	
HPM 8013	Research Methods in Health Policy	
JRN 5212	The Entrepreneurial Journalist	
JRN 5302	Reporting Lab 1	
JRN 5303	Journalism Concepts I	
JRN 5308	Multiplatform Journalism	
MSP 5114	Communication Research Methods	
MSP 8254	Media Campaigns for Social Change	
QARA 5592	Food and Drug Law	
SBS 8105	Health Communication	
Capstone Course		
BIOL 9995	Capstone Project	3
Total Credit Hours		30

- ¹ With approval from the program director, 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.
- ² With approval from the program director, students may take a graduate level course that covers similar material.
- ³ Electives are selected based on the student's interest (eg, regulatory writing, popular science writing, medical communications) under the direction of the program director. Students may select courses that are not listed with approval from the program director.

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.

Accelerated Programs

Undergraduate students may opt to pursue an accelerated +1 program, enabling them to complete both a bachelor's degree and master's degree in less time than the traditional route.

The accelerated pathway for the Scientific Writing PSM is available to students pursuing one of the following programs:

- Biology BA or BS
- Integrative Genetics and Genomics BS
- Natural Sciences BA or BS

Cohort Code; XPSMSCIW

Minimum Cumulative GPA: 3.25

Graduate Courses Approved to Count for Both Undergraduate and Graduate Degrees

Code	Title	Credit Hours
BIOL 5505	Ethics Regulation and Policy in Biotechnology	3
BIOL 5522	Introduction to Scientific and Regulatory Writing	3
BIOL 5532	Introduction to Grant Writing	3
One elective within the Scientific Writing PSM		3

Suggested Academic Plan

Course	Title	Credit Hours
Year 3		
Fall		
BIOL 5505	Ethics Regulation and Policy in Biotechnology	3
Credit Hours		3
Spring		
BIOL 5522	Introduction to Scientific and Regulatory Writing	3
Credit Hours		3
Year 4		
Fall		
One elective in the Scientific Writing PSM		3
Credit Hours		3
Spring		
BIOL 5532	Introduction to Grant Writing	3
Credit Hours		3
Total Credit Hours		12

Admissions Criteria

Candidates for the +1 program must:

- apply during the spring semester of sophomore year or prior to the start of senior year.
- have a 3.25 undergraduate GPA before approval.
- have two faculty members submit a letter of recommendation to cst.gi@temple.edu.
- complete the remaining credits for the master's in the year following undergraduate graduation.

Application: <https://cst.temple.edu/admissions/graduate-admissions>

Contact Information

Darryl Z. L'Heureux, PhD
dzlheureux@gmail.com

Learn more about the accelerated program in Scientific Writing and other College of Science and Technology +1 programs.

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 Director:
Darryl L'Heureux, PhD
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