

SCIENCE COMMUNICATION AND PUBLIC DISCOURSE

MINOR PROGRAM IN SCIENCE COMMUNICATION AND PUBLIC DISCOURSE

The ability to engage the public in discourse around science issues is of increasing importance. The global challenges of the COVID-19 pandemic and climate change highlight the importance of science communication to shape public policy, mold behavior, and spark public awareness of and interest in science. The courses in the Science Communication and Public Discourse (SCPD) minor introduce students to the theory and practice of rhetorical methodologies and behavioral science of communication. Students will learn to build their work on sound scientific evidence and knowledge, to adjust messaging to their intended audience, to use clear and compelling language free of jargon, and to employ effective storytelling techniques and vivid examples. They will also be instructed in how to match their approach to different communicational modes and media (written, video, graphic illustration, podcast, exhibit, performance, and so on). Courses emphasize rhetorical and communicational practice. Embedded within SCPD courses is the opportunity for students to couple their understanding of communication to their own individual scientific interests as they produce a final blog, video, graphic illustration, podcast, performance, or exhibit.

The minor is open to students from all majors.

PROGRAM REQUIREMENTS

The Science Communication and Public Discourse minor requires a total of seven courses.

Science Communication and Public Engagement

All students must take PARR 13700 Science Communication and Public Engagement, which will cover the rhetorical theory around communicating science to a variety of public audiences.

Additional Science Communication Courses

Students are also required to take two of the following four courses:

- SCPD 11100 Science Communication: Writing a Digital Science Story
- SCPD 11200 Science Communication: Producing a Science Video Story
- SCPD 11300 Science Communication: Crafting a Science Think Piece
- SCPD 11400 Science Communication: Podcast
- SCPD 11500 Science Communication: Building a Science Exhibit

Scientific Skills Course

Students must take one Scientific Skills course from the Biological Sciences Collegiate Division (BSCD), Physical Sciences Collegiate Division (PSCD), or Psychology. To count as such, the course may not be used to fulfill a general education requirement. In addition, a Scientific Skills course must have a number in the BSCD, PSCD, or Psychology. General education courses (e.g., PHSC courses) that are not being used to fulfill general education requirements are permitted. Test credit (e.g., Advanced Placement credit) is not permitted.

If a student is majoring or minoring in one of these areas, the Scientific Skills course requirement will be waived, and the student will complete a six-course minor.

Electives

Finally, students must complete at least three electives. Note that either of the two SCPD courses not used as a required course can serve as an elective. Other electives include:

CHDV 23100	Human Language and Interaction	100
MAAD 23930	Documentary Production I	100
MAAD 24550	Evolution of Improvisation in Chicago	100
MAAD 26059	Media, Environment, and Risk	100
PARR 13000	Public Speaking: Theory and Practice	100
PARR 21000	Public Deliberation and Free Expression	100
PSYC 25700	The Psychology of Negotiation	100
TAPS 22500	Styles and Practice in Storytelling	100
TAPS 23600	Improv and Sketch	100
TAPS 25910	Short Form Digital Storytelling: Creating a Web Series	100
TAPS 28320	The Mind as Stage: Podcasting	100
TAPS 28330	Oral History & Podcasting	100

SUMMARY OF REQUIREMENTS

PARR 13700 Science Communication and Public Engagement	100
Two Additional Science Communication Courses	200
One Scientific Skills Course	100
Three Electives	300
Total Units	700

ADVISING AND GRADING

Courses in the minor may not be double-counted with the student's major(s), other minors, or general education requirements. Courses in the minor must be taken for quality grades. Only university-level courses offered by the University of Chicago may be approved to fulfill minor requirements; no other form of credit (including Advanced Placement) is allowed.

To declare the minor, students should contact the Program Director before the end of Spring Quarter of their third year. If the request is approved, the Program Director will submit a completed Consent to Complete a Minor Program (https://humanities-web.s3.us-east-2.amazonaws.com/college-prod/s3fs-public/documents/Consent_Minor_Program.pdf) form to the student's College adviser.

SCIENCE COMMUNICATION AND PUBLIC DISCOURSE COURSES

SCPD 11100. Science Communication: Writing a Digital Science Story. 100 Units.

Students will gain skills in written and digital communication, focusing on translating primary scientific research to a general audience. Students will learn what makes an engaging written article and how to write for the public without sacrificing scientific accuracy or complexity. We will explore platforms such as newspapers, magazines, blogs and social media. Students will work with faculty mentors to complete two written pieces that communicate research findings and their significance to a general audience. Student articles may be disseminated on the websites of the Illinois Science Council, Marine Biology Laboratory, the Institute for Translational Medicine, or the National Institutes of Health. Students will walk away with a polished, published work.

Instructor(s): S. Serritella, P. Mason Terms Offered: Autumn

Prerequisite(s): Three quarters of physical or biological (including neuroscience) sciences. Third- or fourth-year standing. This course does not satisfy the general education requirement in the physical sciences.

Equivalent Course(s): PHSC 28101, BIOS 28101

SCPD 11200. Science Communication: Producing a Science Video Story. 100 Units.

Students will gain skills in oral communication and will apply these skills to produce a TED Talk-style video communicating primary research in a scientific area of the student's choice. The goal is effective, engaging communication of science to a general audience without sacrificing scientific accuracy or complexity. Students will work with faculty to write scripts and design visual and audio elements. The talks will be filmed and edited in collaboration with UChicago Creative, who will assist with visual aids and animation. Students will leave the course with a professionally produced video that they can use to advance their career and promote their topic. While this course naturally follows BIOS 28101, that course is not a pre-requisite.

Instructor(s): Peggy Mason, Sara Serritella Terms Offered: Spring

Prerequisite(s): Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence. Third- or fourth-year standing. This course does not satisfy the general education requirement in the physical sciences.

Note(s): Equivalent Course(s): PHSC 28102

SCPD 11300. Science Communication: Crafting a Science Think Piece. 100 Units.

Science think pieces are an important genre of public writing. Think pieces are longform journalism typically ranging between 2,000 and 5,000 words that appear in print and online publications. Readers of all kinds turn to science think pieces to understand critical issues in STEM fields and get a big picture perspective. Science think pieces provide deep context, informed perspective, and expert synthesis of the most recent data and findings. They have the power to shape public opinion and influence science policy. This course guides students through the process of conceiving, developing, pitching, writing, and potentially publishing an engaging and persuasive science think piece. Through reading-inspired group discussions and instructor-led writing projects, the course introduces students to current theories and best practices of science communication as well as everyday processes in science journalism and public-facing science writing. Students will finish the course with a polished science think piece ready for submission to potential venues for publication. No prior knowledge of science communication is required.

Instructor(s): Jordan Bimm Terms Offered: Autumn Winter

Prerequisite(s): Three quarters of physical or biological (including neuroscience) sciences. Third- or fourth-year standing or consent of instructor.

Equivalent Course(s): BIOS 28103, PHSC 28104

SCPD 11400. Science Communication: Producing a Science Podcast. 100 Units.

Podcasts are one of the most popular ways for non-experts to learn about science and for working scientists to follow happenings in other fields. Podcasts are audio productions typically ranging between 20 and 45 minutes. Science podcasts provide context, perspective, and synthesis to diverse audiences. They have the power to

highlight recent findings, surface the everyday aspects of scientific research practices, amplify diverse voices in the sciences, and combat misinformation. This course prepares students to create science content in audio formats through practical studio experience. It provides a platform for science storytelling, an introduction to science communication theory, and covers science journalism best practices. Emphasis will be placed on crafting compelling audio stories, interviewing techniques, narration, sourcing audio clips and samples, editing, accessibility, and creating show notes and supporting materials. Students will finish the course with a polished science podcast episode ready for publishing. No prior knowledge of science communication is required.

Instructor(s): Jordan Bimm Terms Offered: Winter

SCPD 11500. Science Communication: Designing a Science Exhibit. 100 Units.

For more than a century, public science exhibits have popularized and increased access to scientific knowledge. Today, science exhibits are typically found at museums, planetariums, libraries, zoos, historical sites, universities, and online. Science exhibits allow the public to engage with material examples of scientific work and its products, learn from interpretive text and diagrams, and make connections between the history of science and science in the present day. They have the ability to foster public support for science, inspire future and early career scientists, and make science more accessible for audiences of all ages. This course prepares students to conceptualize, propose, design, install, curate, and evaluate science exhibits. The class will include visits to science collections and museums, interactions with professional curators, and will explore practical aspects of science communication theory. Students will finish the course ready to develop effective and informative science exhibits in both small and large formats, from a display case to an exhibit hall. No prior knowledge of science communication is required.

Instructor(s): Jordan Bimm Terms Offered: Winter

