

# SCIENCE COMMUNICATION AND PUBLIC DISCOURSE

Department Website: <https://parrhesia.uchicago.edu/scpd> (<https://parrhesia.uchicago.edu/scpd/>)

## 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 (700 units).

### Introduction to the Field of Science Communication

All students wishing to minor in SCPD must take SCPD 11800 (<http://collegecatalog.uchicago.edu/thecollege/sciencecommunicationpublicdiscourse/>) Introduction to the Field of Science Communication, which will cover foundational theories, practices, and cases in science communication.

### Additional Science Communication Courses

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

|            |  |     |
|------------|--|-----|
| SCPD 11100 | Science Communication: Writing a Digital Science Story | 100 |
| SCPD 11200 | Science Communication: Producing a Science Video Story | 100 |
| SCPD 11300 | Science Communication: Crafting a Science Think Piece  | 100 |
| SCPD 13700 | Science Communication and Public Engagement            | 100 |
| SCPD 11400 | Science Communication: Producing a Science Podcast     | 100 |
| SCPD 11500 | Science Communication: Designing a Science Exhibit     | 100 |

### Scientific Skills Course

Students must take one Scientific Skills course from the Biological Sciences Collegiate Division (BSCD), Physical Sciences Collegiate Division (PSCD), Pritzker School of Molecular Engineering (PME), 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, PME, 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 any of the SCPD courses not used as a required course can serve as an elective. Other electives include:

|            |   |     |
|------------|---|-----|
| CHDV 23100 | Human Language and Interaction                        | 100 |
| MADD 23930 | Documentary Production I                              | 100 |
| MADD 24550 | Evolution of Improvisation in Chicago                 | 100 |
| MADD 26059 | Media, Environment, and Risk                          | 100 |
| PSYC 25700 | The Psychology of Negotiation                         | 100 |
| SCPD 11600 | The Body on Display                                   | 100 |
| SCPD 11700 | Science Communication: Explorations of Mars           | 100 |
| SCPD 25000 | Science Communication: Science Writing for Scientists | 100 |
| SCPD 26021 | Sense & Sensibility & Science                         | 100 |

|            |  |     |
|------------|--|-----|
| SCPD 26900 | Communicating Science: For Peers and the Public        | 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

|  |  |     |
|--|--|-----|
| SCPD 11800                                   | Introduction to the Field of Science Communication | 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 SCPD Minor Form (<https://parrhesia.uchicago.edu/sites/default/files/2025-05/SCPD%20Minor%20Consent%20Form.pdf>) 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; S. Kron 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): BIOS 28101, PHSC 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 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): S. Serritella; S. Kron. Terms Offered: Spring

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.

Equivalent Course(s): PHSC 28102, BIOS 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 Spring Winter

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

Equivalent Course(s): HIPS 11300, 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: Spring 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

**SCPD 11600. The Body on Display. 100 Units.**

In this course we will examine the historical and ethical landscape of exhibiting humans in various forms to a viewing public. Our focus is on the display of corpses and human remains in museums and books. We discuss medical, legal, cultural, and journalistic views toward bodies as they transition from a living being to a recognizable corpse, to bones, and eventually to dust. We examine the transformations that have occurred in sourcing, displaying, and preserving images of dead bodies and body parts across time from before Vesalius to von Hagens and the current day. We explore how the audience targeted for human body displays has changed across history and continues to change today. We look at gross anatomy dissection of human corpses as a rite-of-passage in medical education. Time permitting, we will examine the display of living humans in telethons and in the baby displays of Martin Couney. Source material will come primarily from memoirs, academic articles, and long-form journalism. Ultimately, our interrogation of bodies on display will reveal implicit societal attitudes toward life, death, and personhood.

Instructor(s): Peggy Mason Terms Offered: Winter

**SCPD 11700. Science Communication: Explorations of Mars. 100 Units.**

Mars seems to be on everyone's mind. Is there life there? Will humans ever set foot on the surface? Should we try to establish a settlement? How did we become obsessed with the Red Planet in the first place? This course will prepare you to communicate effectively about space science and join conversations about Mars happening across society. Through readings, activities, and discussions focused on history, science, and culture we will build an understanding of important figures, events, ideas, and trends required to communicate about Mars. A major focus will be learning how Mars has factored into different social and cultural movements here on Earth, including theological debates, military conquest, scientific exploration, and commercial settlement. We combine this foundation with theories and practices from science communication, including how to engage non-expert audiences, explain complex terms and concepts, convey uncertainty and ambiguity, and counter misinformation and conspiracy theories. The course moves from the earliest visual observations of Mars to present-day robotic missions on the planet's surface, and also considers plans for future human exploration and habitation. Students can expect a deepened understanding of our important cosmic neighbor and how to think, write, and speak about it. No prior knowledge of Mars is required.

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

Equivalent Course(s): CEGU 26070, HIPS 21700

**SCPD 11800. Introduction to the Field of Science Communication. 100 Units.**

Communicating accurately and effectively about science to non-expert audiences is quickly becoming an essential skill for scientists and non-scientists alike. This course provides a foundation in science communication theory and practice that prepares students to communicate about their own research, or someone else's across a wide range of media formats and situations. Broadly scoped, this course covers the history of science communication, different approaches to engaging public audiences about science, theories of communication and science education, as well as practical training in science journalism and science writing. Each week we

will focus our learning by investigating and analyzing a different historical case study from the perspective of science communication including breakthroughs, emergencies, debates, innovations, controversies, and everyday applications of research. Concepts and skills we will cover include the deficit model of science communication, communicating uncertainty and risk, engaging diverse stakeholders, addressing misconceptions, fact checking to ensure scientific accuracy, and communicating about major discoveries and everyday practice. No prior knowledge of science communication is required. All students wishing to minor in SCPD must take SCPD 11800 Introduction to the Field of Science Communication, which will cover foundational theories, practices, and cases in science communication.

Instructor(s): Jordan Bimm Terms Offered: Spring  
Equivalent Course(s): HIPS 11800

**SCPD 13700. Science Communication and Public Engagement. 100 Units.**

Communicating science and translating research to public audiences presents particular challenges. Based in rhetorical theory and analysis, this course prepares students to create and deliver oral, written, and digital communication to a public audience. Centering on theory and research identifying best practices, the course engages students in inquiry, interrogation, research, and testing of how to communicate complex and/or contentious scientific information to various audiences. Readings will include theory and analyses, including emerging research in effective public engagement of science. Written, oral, and digital assignments will provide students opportunities to practice, build, and hone capacities to translate research and engage the public with science.

Instructor(s): Ekaterina Lukianova Terms Offered: Spring  
Note(s): Equivalent Course(s): PARR 13700

**SCPD 25000. Science Communication: Science Writing for Scientists. 100 Units.**

With misinformation about science more common than ever, it is critically important that the next generation of scientists learn how to communicate their work. Yet scientists are most often trained to explain their work to other scientists, not to the public at large. This class focuses on a breadth of different media that scientists can use to share the importance and complexity of work to a lay audience, from text, to imagery, to video and audio, focusing on how to construct simple and compelling stories from complex scientific ideas, and to convey accuracy without sacrificing clarity. Through in-class workshops and discussions, the students will learn how to break down different aspects of good science writing, including story leads, quotes, and description, and practice interview skills with visiting scientists. Students will apply these skills through three writing projects of increasing length, ending with a final project telling a long science story through the medium of their choice. No prior knowledge of science communication is required. This course is part of the Semester in Environmental Science Program at the Marine Biological Laboratory

Instructor(s): Claudia Geib Terms Offered: Autumn

Prerequisite(s): This course requires enrollment in the Semester in Environmental Science Program at the Marine Biological Laboratory

Note(s): Equivalent Course(s): TBD

**SCPD 26021. Sense & Sensibility & Science. 100 Units.**

In Sense & Sensibility & Science, you will learn how to better incorporate into your thinking and decision making the problem-solving techniques of science at its best. Many insights and conceptual tools from scientific thinking are of great utility for solving problems in your own day-to-day life. Yet, as individuals, as groups, as whole societies we fail to take full advantage of these methods. The focus in this course is on the errors humans tend to make, and the approaches scientific methodology has developed (and continues to develop) to minimize those errors. The course includes a discussion of the nature of science, what makes science such an effective way of knowing, how both non-scientific thinking and scientific thinking can go awry, and how we can reason more clearly and successfully as individuals, as members of groups, and as citizens of a democracy. This course is cross-listed with the McKeon Center in the UChicago College. This undergraduate course is simultaneously taught at UC Berkeley, Harvard and UChicago in spring. UChicago's spring 2024 course premiere built on a decade of experience developing and teaching the popular course at Berkeley and Harvard's adoption of its own version in 2021.

Instructor(s): Reid Hastie, Julia Koschinsky, and guest lecturers Terms Offered: Spring

Prerequisite(s): PQ: Third or fourth-year standing.

Equivalent Course(s): KNOW 26021, BPRO 26021, HIPS 26021, SOSOC 26021, PBPL 26021, DIGS 26021

**SCPD 26900. Communicating Science: For Peers and the Public. 100 Units.**

This architectural studio course explores strategies for effectively communicating and presenting science to the public in a campus setting. Students will discover a compelling science story generated by UC scholars and present it as a multimedia exhibit proposal. Student groups also will collaborate on the development of a plan for a campus science exhibition space and science quad involving design charettes led by architects and landscapers. The class emphasizes verbal, visual, and spatial communication methods and incorporates scholarly writing, podcasts, websites, social media communication, design charettes, and 3D model-making. Students will hone their skills to effectively communicate breaking science in an engaging manner in a new campus setting.

Instructor(s): Paul Sereno, Chana Haouzi, Jeremy Manier Terms Offered: Not offered in 2025-2026

Prerequisite(s): PQ: Third or fourth-year standing. This course does not require prior experience, and all are welcome. If you would like to join the class, please complete this consent form at [arthistory.uchicago.edu/archconsent](http://arthistory.uchicago.edu/archconsent) so we can learn more about you.

Equivalent Course(s): CHST 26900, BPRO 26900, ARTH 26809, MADD 26900, ARCH 26900

