Course Syllabus

Course Description

This course is an introduction to communicating science, with a focus on environmental and occupational health sciences. We’ll learn about the different forms of science communication, from academic papers to the casual talk, and we will practice writing and speaking skills with hands-on activities.

We'll also dive deep into skills that support good science communication. We'll learn about tailoring our message for specific audiences, how to consume media critically, how to interview others, and how to revise your own and other people’s work. Ideally, you'll leave this course with a better understanding of how science research makes it out into the world, and you’ll have real-world skills you can apply whenever you have the opportunity to communicate science.

Learning Objectives

Upon completion of this course, students should be able to:

- Identify and strategically target a variety of audiences for science communication
- Find, evaluate, and use public health information to communicate with others
- Learn and practice the basic mechanics of writing and public speaking skills
- Compose and revise written materials and oral presentations
- Describe how the media ecosystem works, including the role and importance of data collection and research in public health
- Critically evaluate sources of information

Course topics

Here's a sampling of topics we'll cover in the course by week. (Exact lessons are subject to change, based on students' interest and any COVID interruptions.)

Week 1: Reading a research paper

Week 2: Communicating with a general audience | Literature reviews

Week 3: Elements of writing | Executive summaries

Week 4: Editing and self-editing | Thinking critically

Week 5: Basics of writing a news article

Week 6: Public speaking basics
Week 7: Tailoring your message

Week 8: Design in science communication | Interviewing skills

Week 9: Environmental Health Science Fiction | Using Popular Entertainment to Educate

Learning assessment

Like any other skill, science communication requires practice. Around half of your total grade will be based on weekly reflections and your participation in class discussions, quantified via Canvas discussions or other small assignments.

These discussions are designed to provide an opportunity not only to write, but also to think about your audience and what makes for compelling science writing. These discussions will usually be assigned before class, but occasionally we may write them during class—if you need to, you may go back to your in-class discussions and expand them later.

The discussions will hopefully allow us to build an ecosystem of conversation that will allow everyone to talk in class—it's easier when you have a chance to write down your thoughts in advance!

Speaking of speaking in class: in my experience, spoken class conversations often revolve around a few people who find it easy to contribute. If that's you, great! Welcome and please do! If it's not, let's work on it. Introverts: I am one of you, and I understand it's hard. People who might have language barriers: I admire your courage and am ready to do whatever I can to help you. People who may have real-life issues that may make this class especially difficult: I'm always willing to talk to you individually, not just about course content, but about life. If you are having trouble, reach out! If you fall behind, I may be able to design a make-up assignment.

Throughout the course, we’ll build our toolkit of writing and communication skills, first practicing how to read, analyze, and summarize research for others within our field, then trying our hand at writing and talking about it to a general audience.

Here's a summary of your major assignments:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Total grade %</th>
<th>Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflections, discussions, and exercises</td>
<td>55%</td>
<td>(throughout course)</td>
</tr>
<tr>
<td>Literature review</td>
<td>5%</td>
<td>Jan 19</td>
</tr>
<tr>
<td>Executive summary</td>
<td>10%</td>
<td>Jan 26 (1st draft)</td>
</tr>
</tbody>
</table>
Syllabus for ENV H 320 A Wi 23: Introduction To Technical Communication In Environmental Health

Feb 2 (final draft)

Feb 9 (1st draft)

Feb 16 (2nd draft)

Feb 23 (final draft)

News article 15%  
Feb 2 (final draft)

Feb 9 (1st draft)

Feb 16 (2nd draft)

Feb 23 (final draft)

Final presentation 15%  
Last week of class (March 7 & 9)

Absences and extensions

You should be present in class. Of course, sometimes there are good reasons to miss a day—sickness, for instance. I fear another quarter of illness, so let's do what we can. Don't mess around with illness: if you feel sick, stay home, and I can catch you up on what you miss. I may offer a Zoom option for people who are sick. These links are not simply so you can attend from home (sorry, commuters!)—they are an important public health tool. Don't hesitate to ask for one if you need it, but don't abuse the offer, either.

I am more interested in education than deadlines. If you miss class or an assignment, we can probably work out an alternative (usually an extended version of the written work for the day).

Technology

You have probably already figured this out, but you should bring a laptop or comparably powerful device to class each day. You need to be able to write. If you don't have a laptop or if yours should meet an awful fate during the quarter, you can borrow one via the Student Technology Fund's program. If you need a cheap laptop, I personally recommend Interconnection. DOEHS is partly about sustainable communities, so let's take a look at Interconnection now. They are pretty cool.

https://interconnection.org/about_us.php

Email

The easiest way to reach me is via email: babbie@uw.edu. You can also send me a message through Canvas. I'll do my best to respond in a timely manner, but please be prepared to wait at least a day for a response, if not longer. I check and respond to emails between 9am and 5pm on weekdays. No guarantees on weekends.

Classroom Climate
The UW School of Public Health seeks to ensure all students are fully included in each course. We strive to create an environment that reflects community and mutual caring. We encourage students with concerns about classroom climate to talk to your instructor, your advisor, a member of the departmental or SPH Diversity Committee and/or the program director. Victoria Gardner, Assistant Dean for Equity, Diversity and Inclusion (vg@uw.edu) is also a resource for students with classroom climate concerns.

**Access and Accommodations**

Your experience in this class is important to me. If you have already established accommodations with Disability Resources for Students (DRS), please communicate your approved accommodations to me at your earliest convenience so we can discuss your needs in this course.

If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations (conditions include but not limited to; mental health, attention-related, learning, vision, hearing, physical or health impacts), you are welcome to contact DRS at 206-543-8924 or uwdrs@uw.edu or disability.uw.edu.

DRS offers resources and coordinates reasonable accommodations for students with disabilities and/or temporary health conditions. Reasonable accommodations are established through an interactive process between you, your instructor(s) and DRS. It is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law.

**Religious Accommodations**

Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW’s policy, including more information about how to request an accommodation, is available at Religious Accommodations Policy. Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form.

**Academic Integrity**

Students at the University of Washington (UW) are expected to maintain the highest standards of academic conduct, professional honesty, and personal integrity. The UW School of Public Health (SPH) is committed to upholding standards of academic integrity consistent with the academic and professional communities of which it is a part. Plagiarism, cheating, and other misconduct are serious violations of the University of Washington Student Conduct Code (WAC 478-120). We expect you to know and follow the university’s policies on cheating and plagiarism, and the SPH Academic Integrity Policy. Any suspected cases of academic misconduct will be handled according to University of Washington regulations. For more information, see the University of Washington Community Standards and Student Conduct website.
Safety

Call SafeCampus at 206-685-7233 anytime – no matter where you work or study – to anonymously discuss safety and well-being concerns for yourself or others. SafeCampus’s team of caring professionals will provide individualized support, while discussing short- and long-term solutions and connecting you with additional resources when requested.

Council on Education for Public Health (CEPH) Competencies

This course addresses the following CEPH domains:

D-10-1 Public Health Domains

- **Role and Importance of Data in Public Health**: Address the basic concepts, methods, and tools of public health data collection, use, and analysis and why evidence-based approaches are an essential part of public health practice (this course covers: basic tools of data collection; data usage; data analysis)
- **Human Health**: Address the underlying science of human health and disease including opportunities for promoting and protecting health across the life course (this course covers: science of human health and disease; health promotion)
- **Determinants of Health**: Address the socio-economic, behavioral, biological, environmental, and other factors that impact human health and contribute to health disparities (this course covers: environmental factors’ impacts on human health and health disparities)
- **Project Implementation**: Address the fundamental concepts and features of project implementation, including planning, assessment, and evaluation (this course covers: introduction to planning concepts and features)
- **Health Communications**: Address the basic concepts of public health-specific communication, including technical and professional writing and the use of mass media and electronic technology

D11. Public Health Bachelor’s Degree Foundational Competencies

- Communicate public health information, in both oral and written forms, through a variety of media and to diverse audiences
- Locate, use, evaluate and synthesize public health information

D13-1 Concepts

- Community dynamics
- Research methods
- Teamwork and leadership