Course description: The ability to communicate your research in an effective and coherent way is critical to your success as a scientist. A profound scientific result is useless if it can't be conveyed to a broader audience. Yet, many of us struggle with this essential, practical skill. Communicating well takes practice. In this class we will take an applied approach to communicating science—you will bring your research or research interest in the form of written work, graphics and slides and we will work together on improving it. We will practice the fundamentals of writing, speaking, and making graphics to convey your ideas to your audience in an interesting, accessible way; along the way you’ll be gaining a valuable set of tools that you will apply in your scientific career.

Learning outcomes:

- Improved proficiency with reading and understanding the primary scientific literature
- Improved ability to synthesize and distill scientific information and to express your arguments clearly and concisely
- Practice with presenting information orally
- Building community by providing constructive reviews your peers’ work and incorporating reviews into your own work
- The opportunity to present your work visually and orally during a final presentation

Course requirements:
Grading will be based on class participation, your writing/presentation assignments, and on your constructive reviews of the writing of your peers. Everyone will be working on a writing project throughout the term. The writing will be a draft of all (or part) of either a research paper or a thesis proposal based on your current research or research interests. Alternative writing projects are possible and encouraged but please approach me early in the term to discuss the possibilities.

There will be weekly assignments. These assignments will require that you maintain a schedule of writing, peer review, revising, and handing in the assignments each week. There will be no final exam. Instead, during week 9 you will produce the final version of your written project. During week 10, everyone will present an oral presentation of their project; this will give you a chance to explore different ways of communicating the same information.

Office hours: You are welcome and encouraged to meet with me in person or over Zoom. I will be available for 30 min. after class each day or we can set up an alternative time to meet.

Grading structure:
Writing assignments (7) 35%
Final project—writing assignment 40%
Final presentation 10%
Class participation 15%
References:


All readings will be provided as needed to students and available on Canvas. You are welcome to purchase any of the course books for your personal reference library but this is optional.

Accessibility: The University of Oregon is working to create inclusive learning environments. Please notify me if there are aspects of the instruction or design of this course that result in disability-related barriers to your participation. You are also encouraged to contact the Accessible Education Center in 360 Oregon Hall at 541-346-1155 or uoaec@uoregon.edu.

Classroom citizenship: As we will be fully in-person this term, please remember to:
- Stay home if you’re sick
- Get to know your neighbors in class, and let them know if you test positive
- Watch for signs and symptoms
- Wash your hands frequently

Please follow the guidance on the UO COVID-19 case management webpage if you test positive or are a close contact of someone who tests positive.

Mental Health and Wellness: Life as a graduate student can be very complicated. Students often feel overwhelmed or stressed, experience anxiety or depression, or just need help navigating challenges in their life. If you’re facing such challenges, you don’t need to handle them on your own—there’s help and support on campus.

As your instructor if I believe you may need additional support, I will express my concerns, the reasons for them, and refer you to resources that might be helpful. It is not my intention to know the details of what might be bothering you, but simply to let you know I care and that help is available. Getting help is a courageous thing to do—for yourself and those you care about.

University Counseling Services (UCS) has a team of dedicated staff members to support you with your concerns, many of whom can provide identity-based support. All clinical services are free and confidential. Find out more at counseling.uoregon.edu or by calling 541-346-3227 (anytime UCS is closed, the After-Hours Support and Crisis Line is available by calling this same number).

Reporting Obligations: I am an assisting employee. For information about my reporting obligations as an employee, please see Employee Reporting Obligations on the Office of Investigations and Civil Rights Compliance (OICRC) website. Students experiencing sex or gender-based discrimination, harassment or violence should call the 24-7 hotline 541-346-SAFE [7244] or visit safe.uoregon.edu for help. Students experiencing all forms of prohibited discrimination or harassment may contact the Dean of Students Office at 541-346-3216 or the non-confidential Title IX Coordinator/OICRC at 541-346-3123. Additional resources are available at investigations.uoregon.edu/how-get-support.
<table>
<thead>
<tr>
<th><strong>TENTATIVESCHEDULE (In class topics/activities)</strong></th>
<th><strong>ASSIGNMENTS (Due Thurs.)</strong></th>
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| **Week 1: How to read** | **Read:** WAB Ch 3  
**Write:** 250-word research description |
| How to read, Practice with sentences- content | |
| **Week 2: The scientific paper** | **Bring:** 1 scientific article to class  
**Read:** CS Ch. 7, WS Ch. 1  
**Write:** Annotated bibliography (3 refs.)  
**Hand in:** Final research description |
| What makes a scientific article effective? Being a good reviewer, Practice with sentences- clarity | |
| **Week 3: Telling your story** | **Read:** CS Ch. 6, WS Ch.2  
**Write:** Draft Introduction |
| Finding good references  
Writing an Introduction/ framing your work  
Practice with sentences- completeness | |
| **Week 4: Distilling your message** | **Read:** WS Ch. 16  
**Write:** Draft Methods  
**Hand in:** Final Introduction |
| Writing titles and abstracts, Methods | |
| **Week 5: Making effective graphics** | **Read:** CS Ch. 9; **Bring:** 2 ex. of effective graphics  
**Write:** Draft Figure/ Results  
**Hand in:** Final Methods |
| Making plots and schematics  
Explore: plots from published papers | |
| **Week 6: Metaphor in science and the bigger picture** | **Read:** MT Ch. 2, Kill Your Darlings  
**Write:** Draft Discussion  
**Hand in:** Final Figure/ Results |
| Developing context for your work  
Practice with sentences- conciseness | |
| **Week 7: Knowing your audience** | **Read:** WS Ch. 20, **Bring:** Completed message box  
**Write:** Draft Abstract  
**Hand in:** Final Discussion |
| Who are you targeting? Reaching the public | |
| **Week 8: Writing proposals** | **Read:** WAB Ch. 10  
**Hand-in:** Final Abstract |
| Engaging others in your work  
Practice with sentences- flow | |
| **Week 9: Oral and poster presentations** | **Read:** WAB Ch. 12  
**Hand in:** Final paper  
**Bring:** Draft of presentation |
| Dos and don’ts of presenting your research; storyboarding | |
| **Week 10: Final presentations** | **Bring:** Final presentation |
| Poster and oral presentations by each student | |