

ESM 438: Presentation Skills for Environmental Professionals Syllabus

"There are only two types of speakers in the world: those who are nervous and those who are liars"

-Mark Twain

Instructor: Alexandra Phillips (she/her/hers)

Email: phillips.alexandra.a@gmail.com

Office: TBD

Office Hours: TBD

Course Website: Coming Soon

Class Time: Tuesdays, 6550 pm

Lab Time: Fridays, 92 am or 44 pm

Location: Bren Hall 510

I. Course Description

This five week, graduate level course is an intensive dive into public speaking skills for environmental professionals. In lectures, all 20 students will learn about various topics around giving presentations (e.g., appropriate tone, designing slides, outlining talks, answering questions) and practice these skills through individual and group active learning exercises. Prior to and during labs, groups of 10 students will prepare and practice presentations on components of their environmental science research projects (introduction, methods, conclusions), giving and receiving feedback to improve delivery and design. Each lab will sequentially build, culminating in a full 12-15 minute talk per student.

II. Eligibility

This class has no prerequisites and is open to any graduate students at the Bren School, including the MESM, MEDS, and PhD programs. Due to the time needed for each student for practice and feedback, the course is strictly limited to 20 participants. Priority for enrollment will be given to second year MESM students. First year MEDS students are also encouraged to participate. For PhD students, we recommend this class for 2nd or 3rd year students.

III. Learning Goals

By the end of this course, students will be able to:

- Briefly summarize research projects
- Comfortably speak to a live audience
- Limit jargon in science communication
- Design effective and succinct slides
- Outline presentations of any length
- Craft a compelling science story
- Confidently answer questions
- Refine presentations from feedback

IV. Inclusion Statement

UC Santa Barbara understands that everyone has a unique background and perspective. As a classroom, we should strive for an inclusive atmosphere that respects this diversity. While taking this class we ask students to:

- Provide fellow students with feedback that is kind, thoughtful, and constructive
- Respect peers by actively listening during presentations (not working on their own presentations or assignments while others are presenting)
- Share own values, experiences and beliefs but remain open to the views of others
- Communicate in a respectful manner (in disagreements, challenging or criticizing the idea, not the person)

- Share responsibility for including all voices (if you have been speaking often, hold back; if you have been hesitant to talk, look for ways to speak up)
- Avoid playing devil's advocate for the sake of conflict - ask genuine questions to receive genuine answers

V. **Accessibility Statement**

Students with disabilities may request academic accommodations for assignments online through the UCSB Disabled Students Program at <http://dsp.sa.ucsb.edu/>. Please make your requests for accommodations through the online system as early in the quarter as possible to ensure proper arrangement; for certain accommodations, DSP requires at least 10 days notice.

VI. **Grading**

Grading for ESM438 is based on student participation. Each class or lab is worth 10% of the overall grade. An unexcused absence in one class or lecture therefore automatically results in a maximum grade of 90%. Absences will only be excused due to illness or extreme events. If you anticipate missing multiple classes please consider taking the course a different quarter. To receive full participation credit each week, students must 1) actively engage during class and lab activities, 2) listen intentionally and provide critical feedback during peer presentations, and 3) come to labs having prepared and practiced needed materials.

VII. **Class Schedule**

Lecture slides and lab assignments will be posted on the Gauchospace website each week. Links are included below, but note that assignments and slides are still under construction.

Week One | February 13 February 17* | Public Speaking Skills

Lecture:

- Tone, posture, and pacing
- Removing jargon from science communication
- Components of an elevator pitch

Lab:

- Practicing famous monologues
- Giving elevator pitches to various audiences

** Students with faculty reviews on Friday may switch lab sections to avoid conflicts*

Week Two | February 20 February 24 | Outlining Presentations

Lecture:

- Templates for science stories
- Tips for outlining talks
- Writing descriptive title slides

Lab:

- Outlining your overall presentation
- Crafting and practicing your introduction

Week Three | February 27-March 3 | Slide Design

Lecture:

- Typography, images, icons, and color palettes
- Best practices for presenting data

Lab:

- Powerpoint roulette
- Crafting and practicing your methods/results

Week Four | March 6-March 10 | Answering Questions

Lecture:

- Fielding questions after presentations
- How to prepare for interview questions

Lab:

- Practicing your conclusion with follow-up Q and A
- Answering common interview questions

Week Five | March 13-March 17 | Student Choice!

Lecture: *some possibilities below*

- Graphic design and data visualization
- Photographing your science
- Building your scientific brand identity
- Best practices for inclusive science communication

Lab:

- Full run through of 1215 minute talks

VIII. About the Instructor

[Alexandra APhillips](#) is a chemical oceanographer with expertise in science policy, science communication, and science art. Following her bachelors in biology at UCSB's College of Creative Studies, she completed her doctoral degree in organic geochemistry at Caltech and studied marine sulfur cycling. Her PhD also included a social science case study of the Instagram page *Women Doing Science*, which she founded in 2018 to increase the visibility of diverse women in STEM. Alex was also a 2019-2020 American Geophysical Union *Voices for Science* fellow, where she worked to bridge the communication gap between fundamental scientists and their policymakers. Alex works to make science communication more beautiful and effective through freelance work as a photographer and graphic designer. Currently, Alex

works at UCSB's National Center for Ecological Analysis and Synthesis (NCEAS) as their communication and policy officer, translating impactful science to diverse audiences.