Syllabus and description of SIO239 (2 unit version)

Short description

This class addresses two basic aspects of being a successful geophysicist:

1. Effective writing techniques
2. Effective presentation techniques

This course is S/U only, no grade option. The course meets 1.5 hours per week, plus 1 office hour per week.

Part 1: Effective writing

Basic writing techniques:

- Read and discuss the book "Writing science: How to write papers that get accepted and proposal that get funded," Joshua Schimmel
- Writing samples and discussion - Read and analyze abstracts or scientific papers, but focus on how the materials are presented, rather than the actual science.
- Effective use of figures: color palettes, how to compose an effective figure and how to describe it within a scientific paper
- Each student will produce a writing sample (e.g., AGU abstract).

Part 2: Effective presentation techniques

- Basics of a good presentation (slide layout, what to avoid etc)
- Discuss seminars and presentations techniques used in class
- Use zoom/virtual lectures to go over effective and ineffective techniques by looking at "samples"
- Practice scientific conversation and presentations without technology (no powerpoint, keynote, or beamer). This will prepare the students for the departmental exam, but more broadly prepare them for colloquial scientific interaction (talking with colleagues at a conference, talking with colleagues while being interviewed for a job etc).

Breakdown of meetings

A rough breakdown of the meetings is as follows. Meetings 2-10 include a short (15 min or so) discussion chapters of the "textbook" *Writing Science - how to write papers that get cited and proposals that get funded*, by J. Schimmel.

1. Meet and greet (creating a comfortable environment in which students are confident to speak (up), present, discuss and be criticized).
2. Basics of a good figure
3. Basics of a good presentation
4. Discuss last week's seminar
5. Discuss examples of good and bad writing (papers and/or AGU abstracts). How to write collaboratively and how to deal with criticism from collaborators/advisors.

6. Discussion of abstracts written by students I/II
7. Discussion of abstracts written by students II/II
8. How to give a talk without technology and how to carry a scientific conversation. Practice scientific conversation: "What are you working on" in break-out rooms.
9. Technology-free talks + discussion I/II
10. Technology-free talks + discussion II/II