Course Description: This course is designed to help graduate students learn how to communicate better about science to the public, to their fellow scientists, to advocacy groups, and to funding agencies. Scientists are increasingly called upon to explain and advocate science to diverse groups. This course will provide training in writing, speaking, and graphical presentation skills in a variety of formats. Students will also learn how to effectively edit and critique their work and others’. We will focus on writing and communicating in a popular style so that students can develop their abilities to present information clearly and logically; such skills will translate naturally into writing for scientific journals, for grants, and for presentations at conferences.

Course Objectives:
1. Develop skills in editing and critiquing
2. Learn the mechanics that underlie clear and effective communication
3. Increase ability to recognize logical flow and to create logical arguments

Required Books:


Other good books:

Grading:
Grades are based both on the quality of your own writing, and on the quality of your editing of your colleagues’ assignments. There will be several pieces (probably four) that we will work on over several weeks; together, these will be 60% of your grade. 30% of the grade will be based on in class assignments, and 10% will be based on improvement and participation.
Course schedule (subject to modification):

24 January – **Mechanisms**
Basic grammatical techniques for clear writing. Sentence diagramming. Misplaced modifiers. Noun phrases. Avoiding Engfish, the stilted, confusing, overly formal language of poorly written journal articles.

**Assignment:** Find a clearly written, short piece of science journalism. Rewrite it in English. Choose a classic book to read for the semester.

**Reflection:** Look for examples of poor (or good!) structure around you. How would you rephrase them?

31 January – **Editing Engfish**

**Reading:** Williams, ch. 3, 4.

**In class:** Edit the Engfish pieces. How close to the original article is your edited version?

**Assignment:** Choose a short paper to write up as a News and Views piece. Outline the manuscript as it is written.

7 February – **Why do we care?**

**Reading:** Williams, ch. 5, 6.

**In class:** 3 min summaries of your chosen articles. Discuss the organization of the articles. We’ll choose one that we’ll all write up.

**Assignment:** Re-write the article as a News and Views story. 500 words maximum. Look for another paper to write up.

**Reflection:** Outline something you’ve written. Does it make sense?

14 February – **Editing for structure**

**Reading:** Williams, ch. 7, 8

**In class:** Edit the first N&V story. Re-write it in 300 words; then in 100 words; then in one sentence.

**Assignment:** Revise your first N&V story.

21 February – **Editing for structure**

**Reading:** Williams, ch. 9, 10

**Assignment:** Write a second N&V story. 500 words.

28 February – **Newspaper stories and interviews**
**Reading:** von Bubnoff  
Why have quotes? Purpose of the interview.  
**In class:** 3 min talks about the N&V stories. Editing the second N&V story.  
**Assignment:** Revise N&V 2.

7 March – **Emphasis**  
**In class:** Compare original and revised N&V stories. Compare focus of multiple news stories about the same paper.  
**Assignment:** Find an area lab group with a recent publication. Interview the lead author about the work. Write it up as a newspaper story. 300 words.

14 March – **What’s the message?**  
Ledes and endings.  
**Assignment:** Revise newspaper story.

21 March - SPRING BREAK

28 March – **Speaking 1**  
**Guest teacher:** Mihir Mankad, Fletcher School

4 April – **Speaking 2**  
**Guest teacher:** Mihir Mankad, Fletcher School

11 April - **Graphical presentation 1**  
Reading: Tufte, ch. 4-8.  
In class: Redrawing figures. Drawing your hypotheses. Pitches for longer stories.  
Assignment: Develop some plots of our data set.

18 April – **Graphical presentation 2**  
(meet in Tisch DataLab, room 203)  
More on figures. Writing a good caption. Why do we care (again)?  
Reading: Points of view.  
In class: Computer programs for making good figures. Using Illustrator to tweak. Also, Pitch for research story

25 April – **Telling a story**  
And, but, therefore. Writing for story. The hero’s journey.  
Reading: Olson  
In class: Shifting baselines?