

Effective Communications (01:447:430): Fall 2020
Description/format of class

CHANGES DUE TO COVID: SYNCHRONOUS REMOTE EXPLAINED

This course was designed to utilize an active learning environment format. Unfortunately, due to the Covid crisis, I had to convert the course to remote instruction. In converting this course, I have tried to maintain the active learning environment so that you will continue to have interactions with me and your classmates.

The converted course will use “**synchronous remote instruction**” format. This means that, on most dates, you will need to log into our online class, probably using Zoom, at the scheduled course time. Most of the classes will be group work and I will place you in small groups and utilize Zoom’s “Breakout Rooms” in which I can “visit” through the course time. There are some lectures, mostly early in the semester. For most of these, I recorded them ahead of time so you can watch them at a time that works for you. However, when I give lecture/presentation during the scheduled course time, I will use Zoom’s record function and later, provide a link.

There will be 3 online quizzes and an online homework assignment. I will also have office hours, but you will need to email me to schedule a time. For more information, please review the syllabus for information on grading and “What is the class like?” [CLICK HERE TO VIEW THE SYLLABUS OUTSIDE OF CANVAS.](#)

Technology: You will need high-speed internet so that you can participate in the Canvas/Zoom class. I need to know if any of you have technology issues with connecting during class time. If so, please email me.

What is the class like?

This is an applied course to help students understand the format and practice of scientific communication. This includes preparing and revising an introduction for scientific papers, writing a research description for general audience, and preparing and giving presentations (both oral and poster). The course is divided into three sections:

Section 1- Writing and incorporating critiques into revisions

The goal of this section is to learn about scientific writing principles, understand specific aims of a research proposal and to be able to incorporate critiques into your writing. To give a structure to the course, we will begin by discussing the process of a research study. We will review the grant proposal process, conducting the research once it is funded, and ultimately publicizing the results in scientific journals and conference abstracts (both oral and poster format). For the grant review process, we will discuss the components of grant proposal, focusing on project narrative, research question, and hypotheses. If possible, students should try to obtain the specific aims from their respective lab to help them understand the larger goals and hypotheses of the lab.

Readings: There will be assigned readings that pertain to the topics we will cover in class. We will NOT cover all areas that are presented in the chapters and you are expected to read the assigned chapters.

Lectures and quizzes: There will be a few short quizzes from the material covered in class and in the readings. Questions will be taken directly from the examples within the chapters or from exercises at the end of the chapters.

New writing exercise: You will write a short lay narrative, limited to 3-5 sentences, describing your research project. This project narrative should use lay language, something that a non-scientist could understand. On the same page, you will write the research question and hypothesis for your project. In collaboration with your research supervisor, you will develop and write this exercise using the format presented in class. In class, we will review and edit each student's project narrative.

Edited writing exercise: You will use what you have learned about scientific writing to edit your classmate's introduction that was submitted in a prior semester. Students will be assigned to an introduction editing group, typically 5-10 per group. This editing will occur outside of class time and you will meet with your group to review suggested edits they give. Later, you will submit your final revised introduction after reviewing your classmate's edits. This final version will include a section describing areas you need to improve in your writing (i.e., self-evaluation of what learned about your writing during this process). This paper will be reviewed by the course professor and possibly sent to your research supervisor. Your grade for this section will be based on your edits of classmate's introduction and your final introduction after editing.

Section 2- Experience in preparing, giving, and analyzing scientific oral presentations

Using the material we reviewed in class and from the relevant textbook chapters, you will prepare an oral presentation. You will be assigned a date to give the presentation. The professor and classmates will critique each presentation using a specific rubric. Your classmates will upload these critiques to a site for you to improve your future oral presentations. You will also need to submit a self-evaluation of your oral presentation.

Section 3- Creating a scientific poster

Through an iterative process, students will create a poster describing their research project or independent study. At the end of class, we will have a virtual poster session. Mimicking a poster session at a scientific conference, individuals (i.e., faculty members, postdocs, and graduate students) will join an online breakout room. The student will give a short presentation and the reviewers will ask questions about the poster.