

## ESCI 8001 - Introductory Graduate Seminar

Fall 2019

Donna L. Whitney

**Overview:** This seminar has several purposes: (1) to foster a cohort of new graduate students; (2) to introduce the varied research being done by different groups in the department; and (3) to help new graduate students develop and strengthen skills in science communication (writing, speaking). The content and format of the seminar will change somewhat from week to week (see schedule).

Some classes will involve a research talk by a faculty member. During these seminars, you are expected to take notes and ask questions. Asking good, professional questions is a skill, and you will practice it in this seminar in a friendly supportive environment. A typical writing assignment associated with this part of the seminar will be to write a concise (1-2 paragraph) summary of each speaker's talk. This requires listening closely to the speaker to discern the essence of the talk, and then writing a short but coherent summary.

In this seminar, you will also write a research proposal (see separate handout), and give a short (12-minute) talk on the same topic. You will practice different types and lengths of writing and speaking to different audiences.

All writing will be submitted via the course Canvas site. Filenames for assignments must be in a specific format: **YourLastName\_Assignment.pdf** (in which "Assignment" is described in the schedule on the next page). *Examples: Whitney\_Summary3.pdf, Fox\_CV.pdf, Petrie\_Proposal.pdf.*

There is no textbook, but you may want to acquire a reference book, such as *Communicating Rocks: Writing, Speaking, and Thinking About Geology* (Peter Copeland), or a non-scientific technical writing guide such as the venerable one by Strunk & White.

**Responsible Conduct of Research module.** This seminar also serves as the ESCI graduate student Responsible Conduct of Research (RCR) training. The department requires all graduate students (as well as researchers and faculty) to complete this or a comparable module. This training will be conducted during the second class meeting (9/11). Attendance at this session is mandatory. Note that you may also be required to complete additional (likely online) training if your research is supported by a federal funding agency (NSF, DOE, NIH etc.).

**Assignments and grading.** The grade basis is S/N. Your grade will depend on attendance, timely completion of all assignments (see schedule), and participation (including presentations and asking questions). Students enter this seminar with large differences in scientific writing ability and experience. I am looking for *effort and improvement* by each student.

*Absences.* You must contact me by email in advance about known absences (travel, etc.) or as soon as possible about unexpected absences (illness, etc.). When possible, I will assign a make-up exercise for the missed class.

**ESCI 8001 - Fall 2019 / 5:00-6:30 PM, Wednesdays, 401-20 John T. Tate Hall**

DATE	Topic/Activity	Assignment
9/4	introductions, general organization & discussion	email exercise 1, due 9/10
9/11	research ethics discussion	none
9/18	faculty talks (2)	summary 1, due 9/24
9/25	faculty talks (2)	summary 2, due 10/1; read grant proposals provided in advance of 10/2 seminar
10/2	proposal writing workshop – discussion of NSF proposals donated by faculty	be prepared to present your proposal idea in 10/9 seminar
10/9	proposal writing workshop – short proposal ‘pitches’ by students (3 minute max/talk)	proposal topic selection (submit short description by 10/15)
10/16	citation/data management systems	citation activity, due 10/22
10/23	faculty conference-style talks (4)	summary 3, due 10/29
10/30	faculty conference-style talks (4)	summary 4, due 11/05
11/6	discussion of professional resumes (CVs), how to give a bad (or good) talk, how to write a professional email	prepare and submit your CV, email exercise 2 – both due 11/12
11/13	student talks on proposal topic – 15 mins	short talks on proposal topics
11/20	student talks on proposal topic – 15 mins	short talks on proposal topics
11/27	proposal workshop: budgets, forms, data	proposal draft due 11/27
12/4	no seminar	proposal due 12/11

**overview of assignments**writing

4 short summaries of faculty talks (consisting of a paragraph or two about each talk)

proposal topic description (a few sentences, with selected bibliography)

proposal draft

complete proposal (~6 pages)

2 e-mail exercises

speaking

2 short presentations (one proposal idea talk; one well-developed proposal-based talk)

other

read 2 NSF grant proposals and prepare to discuss in class

citation-search activity

prepare a CV