

ESCI 8001 - Introductory Graduate Seminar

Wednesday 5:00-6:30 PM

Tate 401-20

2 credits

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Overview of the seminar

Aims of the course are to

- (1) introduce the varied research being done by different groups in the department;
- (2) help new grad students develop and strengthen skills in research and science communication;
- (3) provide required ethics training in a friendly environment that encourages discussion and questions; and
- (3) foster a cohort of new graduate students.

Seminar activities and format

The topics and format of the seminar vary from week to week (see schedule).

In this seminar, you will see/read and practice different types and lengths of communication to different audiences. Three classes will involve talks by faculty members. During these seminars, you are expected to ask questions. Asking good, professional questions is a skill, and you will practice it in this seminar in a supportive environment.

For two of the seminars with faculty presentations, you will write a concise (1 paragraph) summary of each talk. This requires listening closely to the speaker to discern the essence of the talk and then writing a short summary of the talk. Summaries are evaluated for technical writing more than for content: e.g., spelling, grammar, logical flow of sentences.

You will also write two research proposals (see handout) on a topic that you will briefly present to the class and then develop, first in a short (GSA-style) proposal and then as a longer format proposal on the same topic. The topic should be related to your graduate work and must consist entirely of original writing by you specifically for this seminar. You will also prepare a poster based on this proposal and present it in the last class.

Responsible Conduct of Research module

This seminar 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 and third class meeting (9/15, 22/21). Attendance is mandatory. Note that you may also be required to complete additional 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. To achieve a grade of S, you must attend all seminars (or contact me about a necessary absence, see *Absences*), turn in all assignments on time (see schedule), and actively participate during the seminar sessions (including 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. [link to UMN [general policies and definitions related to grading](#)]

Absences. You must contact me in advance about known absences or as soon as possible about unexpected absences (illness, etc.). I will assign a make-up exercise for the missed class(es). In some cases, it may be possible for the seminar to be simultaneously in-person and online if your absence is owing to your need to isolate owing to mild illness or suspicion of illness – please communicate with me in advance and I will do my best to work something out. [link to UMN [policy on makeup work for legitimate absences](#). Students will not be penalized for absences during the semester due to unavoidable or legitimate circumstances. Such circumstances include verified illness, participation in intercollegiate athletic events, subpoenas, jury duty, military service, bereavement, and religious observances.]

Communication

Please contact me whenever you have questions or concerns. We can meet during an individual Zoom appointment, discuss your questions and ideas by email, or meet somewhere (outside, weather permitting, or inside/distanced) to chat.

I care about your well-being and your overall experience in the department as a scholar, instructor, and community member, so I welcome talking with you.

COVID-19, Face-Coverings, Symptoms, and Vaccination

The University of Minnesota currently requires all students, staff, and faculty to wear masks when indoors regardless of vaccination status. Students are required to be vaccinated for COVID-19. Resources are available for accessing vaccines.

Please stay at home if you experience symptoms of COVID-19 and consult with your healthcare provider about an appropriate course of action. An absence due to symptoms of COVID-19 is an excused absence, and I will work with you to find the best course of action for missed work and/or class experiences.

Please consider your classmates and instructors if you feel unwell or if you have been in close contact with someone with COVID-19. The Minnesota Department of Health has [essential information](#) on what to do if you have been in close contact with someone who has been infected or if you are infected yourself.

The School of Earth and Environmental Sciences recommends downloading and enabling the [COVID aware MN app](#) on your phone. This app tracks COVID-19 exposure – completely anonymously – and notifies you if you have been near someone who reports a positive COVID-19 test to the app. This allows us all to take appropriate steps (testing, isolation) to reduce the spread of the virus.

Other UMN required syllabus information

[policy on scholastic honesty](#) (note that in this seminar, plagiarism and failure to cite sources of information are examples of scholastic dishonesty and will be treated as such)

[teaching & learning: student responsibilities](#)

[UMN policy on sexual harassment, sexual assault, stalking, and relationship violence](#)

The University prohibits sexual misconduct and encourages anyone experiencing sexual misconduct to access resources for personal support and reporting. If you want to speak confidentially with someone about an experience of sexual misconduct, please contact your campus resources including the Aurora Center, Boynton Mental Health or Student Counseling Services (<https://eoaa.umn.edu/report-misconduct>). If you want to report sexual misconduct or have questions about the University's policies and procedures related to sexual misconduct, please contact the Title IX office.

Note that instructors are required to share information they learn about possible sexual misconduct with the campus Title IX office. This allows a Title IX staff member to reach out to those who have experienced sexual misconduct to provide information about personal support resources and options for investigation. You may talk to instructors about concerns related to sexual misconduct, and they will provide support and keep the information you share private to the extent possible given their university role.

[equity, diversity, equal opportunity, and affirmative action](#)

The University provides equal access to and opportunity in its programs and facilities, without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, membership or activity in a local commission created for the purpose of dealing with discrimination, veteran status, sexual orientation, gender identity, or gender expression.

disability services

The University views disability as an important aspect of diversity and is committed to providing equitable access to learning opportunities for all students. The [Disability Resource Center](#) (DRC) is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations.

- If you have, or think you have, a disability in any area such as mental health, attention, learning, chronic health, sensory, or physical, please contact the DRC office (626-1333) to arrange a confidential discussion regarding equitable access and reasonable accommodations.
- If you are registered with the DRC and have a disability accommodation letter dated for this semester or this year, please share this with me *early in the semester* so that I can work with you to figure out how the accommodations can be applied in the seminar

mental health resources and other support

You may experience a range of mental health issues or stressful events that can cause barriers to learning and that affect your daily life. [University services](#) are available to assist you. Please seek help if you need it, either by contacting one of the UMN support services or by talking with someone who help with this.

academic freedom and responsibilities

Academic freedom is a cornerstone of the University. Within the scope and content of the course as defined by the instructor, it includes the freedom to discuss relevant matters in the classroom. Along with this freedom comes responsibility. Students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. Students are free to take reasoned exception to the views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled.*

Reports of concerns about academic freedom are taken seriously, and there are individuals and offices available for help, including the department head, your adviser, the associate dean of the college, or the Vice Provost for Faculty and Academic Affairs in the Office of the Provost.

** Language adapted from the American Association of University Professors "Joint Statement on Rights and Freedoms of Students".*

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week	date	topic/activity	assignment/due date
1	9/8	introductions, general organization, discussion about research strategies/logistics	none
2	9/15	research ethics 1 (classical ethics topics)	email exercise 1, due 9/21
3	9/22	research ethics 2 (geo-ethics)	none
4	9/29	literature search/citation/reference management systems	literature search/citation activity, due 10/5; read 2 grant proposals for 10/6
5	10/6	proposal workshop, part 1 – discussion	none
6	10/13	faculty talks (2)	summary of talks; due 10/19
7	10/20	proposal workshop, part 2 – student proposal lightning talks (2 minutes each)	written short summary of proposal topic, due 10/26
8	10/27	more on proposals: budgets, data management	submit questions/topics by 11/2 for 11/3 class
9	11/3	research/writing strategies – discussions with senior grad students	upload your CV by 11/9
10	11/10	how to give a bad talk or poster	work on your proposal
11	11/17	discussion and practice: scientific illustrations	proposal #1 due 11/24
12	11/24	no seminar	work on proposal/poster
13	12/1	faculty talks (2)	summary of talks; due 12/07
14	12/8	faculty talks (2)	work on proposal/poster
15	12/15	student presentation gala	proposal #2 due 12/22

overview of assignments

writing

- 1 professional e-mail exercise
- 2 sets of summaries of two faculty talk sessions (1 paragraph/talk)
- proposal topic description (a few sentences, with selected bibliography)
- proposal version #1 (GSA-style proposal)
- proposal version #2 (NSF-style proposal, but shorter than the typical NSF proposal)

speaking

- 1 presentation (a proposal idea 'lightning talk', 2 minutes max)
- prepare and share a poster on research topic

other

- read 2 NSF grant proposals and prepare to discuss in class
- citation-search activity
- submit questions or discussion topics for 11/3 seminar
- prepare a CV