

Ecology 8000: Topics in Modern Ecology - Fall 2020
<http://courses.ecology.uga.edu/ecol8000-fall2020/>

Meeting time and place: 2:20 – 3:50 pm, Tuesday and Thursday, online

Instructors

JP Schmidt – Lead (jps@uga.edu)

Craig Osenberg – Module 1 Lead (osenberg@uga.edu)

Alex Strauss – Module 2 Lead (at Strauss15@gmail.com)

Nina Wurzbarger – Module 3 Lead (ninawurz@uga.edu)

Rebecca Atkins and Carol Yang – Module 4 Leads (atkinsr@uga.edu, cy91370@uga.edu)

Overarching goals – This course offers an introduction to the practice of Ecology as a basic science. Through discussions, exercises, and activities, we will consider ecological questions and concepts from multiple perspectives, across scales, and at distinct levels of organization. This is not a survey of Ecology, but rather an opportunity to engage with the goal of becoming more comfortable and adept at addressing the challenges of research in the field.

The course is divided into 4 modules. What should you expect in a module?

- Discussing primary literature
- Small group activities that require in class and out of class work
- Working with real data
- Formulating and analyzing models
- Short writing assignment, e.g. recommendation for management, short proposal
- Designing an experiment
- Debate
- Peer evaluation

What we expect of you?

- Active engagement in discussions and full participation in group work, in and out of class
- Thorough reading of assigned papers
- A constructive and considerate, but critical attitude
- Completion of short research project before the start of the third module
- The research project can be conducted during the field trip (strongly encouraged)
- A short paper in the form of a Synthesis or Review, due at the end of the semester

Academic honesty – As a UGA student, you have agreed to abide by the University’s academic honesty policy, A Culture of Honesty, and Student Honor Code: <https://ovpi.uga.edu/academic-honesty/academic-honesty-policy>. Ignorance of academic honesty policy is no excuse. Questions related to course assignments and academic honesty policy should be directed to the instructor.

Special needs – Students with disabilities or health related issues who may need class accommodation should consult with the instructor as soon as possible. Accommodations cannot be provided until a student has gone through the Disability Resource Center (DRC) (<http://drc.uga.edu/about/registerforservices.php>, 542-8719) and we have discussed appropriate accommodations for this course. Accommodations cannot be provided retroactively. All conversations are strictly confidential.

Diversity encompasses acceptance and respect. The term "diversity" encompasses differences of culture, background and experience among individuals and groups. Such differences include, but are not limited to, differences of race, ethnicity, national origin, color, gender, sexual orientation, gender identity, age,

and abilities, as well as political and religious affiliation and socioeconomic status. The Odum School at UGA embraces a commitment to diversity, seeking to reduce prejudice, disparities, and discrimination and to build a supportive environment for all.

Schedule*

Date	Day	Lead	Topic	Description
20-Aug	Th	Schmidt	Introduction	Course overview, introductions, 3 questions discussion
25-Aug	T	Osenberg	Module 1 - Inference and ecological controversies	We focus on making inference in ecology emphasizing controversial examples as applications of inferential tools and associated assumptions. As the first module, we stress skills required to critically read the literature and effectively lead and participate in discussions.
27-Aug	Th			
1-Sep	T			
3-Sep	Th			
8-Sep	T			
10-Sep	Th			
15-Sep	T	Strauss	Module 2 -	TBA – Disease ecology
17-Sep	Th			
22-Sep	T			
24-Sep	Th			
29-Sep	T			
1-Oct	Th			
6-Oct	T	Schmidt	Introduction and discussion of review paper assignment	
8-Oct	Th			
13-Oct	T	Schmidt	Presentation on scientific/academic writing by UGA writing center	
15-Oct	Th		Writing exercise - revise review paper abstracts due before class	
20-Oct	T	Wurzburger	Module 3 - Biodiversity and ecosystem function	We explore links between biodiversity and ecosystems. We discuss the history, controversy, and the mechanisms that mediate the BEF relationship. We then analyze datasets of diversity and ecosystem function to test hypotheses and to inspire experimental studies.
22-Oct	Th			
27-Oct	T			
29-Oct	Th			
3-Nov	T			
5-Nov	Th	Atkins and Yang	Module 4 - Representation and identity within the sciences	We will sample topics related to the representation of minority and feminist scientists and will include discussions of identity, race and gendered ideologies within STEM (both in and outside of academia).
10-Nov	T			
12-Nov	Th			
17-Nov	T			
19-Nov	Th			
24-Nov	T			
26-Nov	Th	Thanksgiving		
1-Dec	T	Schmidt	Brief presentation and discussion of review findings by each student	
3-Dec	Th			
8-Dec	T	Schmidt	Discussion and evaluation of class	

*The course syllabus is a general plan for the course. Deviations announced to the class by the instructor may be necessary.

Review paper dates

Sept 11	Topic and outline due
Oct 9	Abstract and preliminary bibliography due
Nov 4	First draft of review (including cover letter) due
Nov 13	Peer reviews due
Dec 1-3	Presentations (15 min) in class
Dec 11	Final draft of review (including response to reviewers) due