

General Ecology
EEB 2244 & 2244W
Spring 2016

Lectures: Tuesday & Thursday 12:30-1:45 PM, BPB 130

Discussion Sections: Torrey Life Sciences 311

Website: HuskyCT: <https://learn.uconn.edu>

Instructors:

Miranda Davis TLS 81: [REDACTED]; office hours: Tuesdays and Thursdays 2:30- 3:30 pm or by appointment

John Cooley TLS 81: [REDACTED]; office hours: By appointment at [REDACTED]

Instructors for EEB 2244W: see HuskyCT 2244W page for assignments and details

Teaching Assistants:

Holly Brown BioPharm 404, [REDACTED]
Jeffrey Divino BioPharm 210, [REDACTED]
Kristen Nolting BioPharm 302, [REDACTED]

Textbook: Ricklefs, R.E. 2014. *The Economy of Nature*, 7th edition. W.H. Freeman, New York.

Also required: i>clicker 2 ('used' is also fine)
scientific (not graphing) calculator

Grading:

Regular Exams (4)	100 pts each
Final Exam	100 pts
Discussion	190 pts (includes participation, quizzes and submitted work)
Lecture Clickers	60 pts
750 total points for EEB 2244 students	

For those in EEB 2244W:

W Assignments	<u>250 points</u>
1000 total points for EEB 2244W students	

Clickers and class activities are used in this course to promote active learning. Participation points are awarded regardless of whether your answers are correct. You will receive 3 points per lecture for participation in any lecture including clicker questions, for a maximum of 60 points, allowing you to miss participation for up to 4 lectures for any reason (e.g., commitments off campus, illness, forgotten clickers, and dead batteries) without reducing the maximum possible participation points. There are no make-ups for these points. **Register your clicker** through the course HuskyCT site no later than January 20.

Required for a passing grade:

- All exams are required.
- By university regulation, students in EEB 2244W must receive a passing grade for their W assignments to pass the course (regardless of test scores).

In addition: Discussions meet weekly. Participation points up to 5 pts per week may be earned in discussion. An additional 5-10 points per week can be earned through discussion-based quizzes and written assignments. You will complete a capstone presentation for the course for up to an additional 40 points. **You must attend**

only the discussion in which you are registered, and there are no make-ups for discussion. If you show up in a discussion section for which you are not registered, **you will not be allowed to stay**.

Only a note from a physician, your academic advisor, or similar authority in advance of a discussion, due date, or exam will be accepted as a valid excuse for absence. Please discuss any foreseeable conflicts with your TA as soon as you become aware of the issue. If you have religious observances that affect your participation in the course, please meet with your TA by the second week of the term to discuss accommodations. Unforeseeable conflicts must be documented through a physician, official police report, or similar authority before we will consider any accommodations.

Academic misconduct will result in lowered grades, failure of the course, or other disciplinary actions. Entering clicker answers for another student is considered cheating and is treated as academic misconduct. If you are caught using a clicker other than your own or have clicker responses recorded in a class that you did not attend you will forfeit all clicker points for the entire semester and may face additional disciplinary action. Bottom line, it is not worth it, don't do it. Please see the University policy on this topic at: http://www.community.uconn.edu/academic_misconduct_faq.html.

Participation points will be lost for violating class rules, such as activities that distract other students. This includes regularly arriving late to, or leaving early from, lecture or discussion, carrying on conversations with classmates during lecture/discussion when the instructor is speaking, and any other activity that are fairly deemed to be disruptive to the classroom experience.

Electronic devices in particular are extremely disruptive and may be used during lectures and discussion only for viewing and taking notes and for answering clicker questions. Any other use of an electronic device during course meetings is off limits. A TA will remind you once nicely; on a second offense you will be told to leave lecture/discussion for the remainder of that meeting. A third offense results in you not being allowed to have any electronic device for the rest of the semester. Please respect your classmates and your instructors by adhering to this policy.

If you decide to withdraw from the "W" part of the course, you must not do it yourself in StudentAdmin. All changes must go through our course administrator, Katie Upson, at kathryn.upson@uconn.edu, or you will lose your seat in the class!

If you need special accommodations because of a disability, we encourage you to meet with your TA privately early in the semester. Contact the Center for Students with Disabilities as soon as possible to verify your eligibility. For more information, please go to <http://www.csd.uconn.edu/>.

The final is cumulative and the final exam period will include the fourth regular exam material.

Final exam week for Spring 2016 takes place from Monday, May 2 through Saturday May 7. Students are required to be available for their exam during the assigned time. **This semester the University is piloting a new procedure to reduce bunched finals. You will be notified of the date, time, and location of the final exam for this course via the Student Administration System no later than March 1 2016.** If you have a conflict with the time that is posted you must visit the Dean of Students to discuss the possibility of rescheduling this exam. Students who have a conflict about which they have or should have had advanced notice (e.g., bunched exams, religious obligation, legal/medical appointments) **MUST** seek permission to reschedule their assessment within timelines posted by the Dean of Students Office. Please note that vacations, previously purchased tickets or reservations, graduations, social events, misreading the exam schedule, and over-sleeping are not legitimate excuses for missing a final exam.

Course Schedule (subject to change)

Date	Topic	Reading (7th Edition)	Discussion
January			
19	The Ecological Theater and Evolutionary Play	Ch 1, Ch 7	No Discussion
21	Hostile Forces, Arms Races, Adaptations	Ch 2, Ch 3. Ch 4	
26	Population Growth	Ch 12	Leaf form and Function
28	Population Structure	Ch 12	
February			
2	Demographic Considerations	Ch 12, Ch 13	Population Dynamics
4	Climate and Biomes	Ch 5, Ch 6	
9	Spatial Structure and Metapopulations	Ch 11	Excel and Statistics
10	Q&A Session for Exam I	7-9 PM BPB 130	
11	Life Histories	Ch 8, Ch 9	
16	Exam I	Jan. 19-Feb. 9	Species Distributions
18	Social Behavior	Ch 9, Ch 10	
23	Optimal Foraging	Ch 4	Behavioral Ecology
25	Population Dynamics	Ch 13	
March			
1	Species Interactions	Ch 14	Optimal Foraging
3	Predator Prey Cycles	Ch 14	
8	Competition	Ch 16	Modeling Interactions
8	Q&A Session for Exam II	7-9 PM BPB 130	
10	Exam II	Feb. 11-March 8	
	Spring Break		
22	Community Structure	Ch 18	Biodiversity
24	Community Development	Ch 19	
29	Coevolution and Mutualism	Ch 17	Species Associations
31	Parasitism and Infectious Diseases	Ch 15	
April			
5	Landscape Ecology	Ch 22	Island Biogeography
5	Q&A Session for Exam III	7-9 PM BPB 130	
7	Exam III	March 22-April 5	
12	Movement of Energy in Ecosystems	Ch 20	Climate Change
14	Movement of Elements in Ecosystems	Ch 21	
19	Carbon Cycle, Climate Change	Ch 21, pp 133-134, pp 250-253	Cons. Bio Presentations I
21	Human impacts	Ch 23	
26	Conservation Biology	Ch 23	Cons. Bio II & Exam Review
28	Aquatic systems	Ch 2, Ch 6 (pp 148-156)	

Exam IV and the Final Exam: These are given together in one sitting and as one document during the final exam period. The final exam period will be posted in the Student Administration System by March 1 2016.

Date ('16)	Discussion Topic	Assignment Due	Points
Jan 19-22	<i>No Discussions</i>		
Jan 25-28	1. Leaf Form & Function Greenhouse tour of examples of specialized leaf adaptations, plus photo contest	Greenhouse Handout Due; <i>Submit photos</i>	P5, H5
Feb 1-4	2. Population Dynamics Generating life tables from Northern Spotted Owl field data	<i>Photo contest award</i>	P5
Feb 8-11	3. Excel Graphing & Statistics Plant occurrence scatterplots & testing hypotheses with penny demography exercises	HuskyCT Discussion Quiz 1, #1-2	P5, Q10
Feb 15-18	4. Species Distribution Modeling (SDM) Modeling invasive plant distributions by climate, using Google Earth, DIVA-GIS, and LifeMapper	Lecture Exam I (Feb 16)	P5
Feb 22-25	5. Behavioral Ecology The Prisoner's Dilemma and other game theory exercises	SDM Handout Due	P5, H10
Feb 29-Mar 3	6. Optimal Foraging Theory SimBio simulation and an optimal foraging game	HuskyCT Discussion Quiz 2, #3-5	P5, Q15
Mar 7-10	7. Modeling Species Interactions Population growth, Lotka-Volterra Predation & Competition modeling in Populus	Select topic for Cons. Bio. Project; Lecture Exam II (Mar 10)	P5
Mar 12-20	<i>Spring Break</i>		
Mar 21-24	8. Measuring Biodiversity Biodiversity Beads activity & tree diversity in a Barro Colorado Island (BCI) plot	Cons. Bio. Project Outline Preparation	P5
Mar 28-31	9. Species Associations (outdoor Lichen Lab) Measuring lichen distributions on tombstones in the Storrs Cemetery	Cons. Bio. Outline/Synopsis/Refs; HuskyCT Discussion Quiz 3, #6-8	P5, Q15, CB10
Apr 4-7	10. Island Biogeography Theory Island Pong game testing the MacArthur-Wilson predictions	Assign Climate Debate "sides"; Lecture Exam III (Apr 7)	P5
Apr 11-14	11. Climate Change Science Mock debate to highlight how scientific evidence is obscured by competing viewpoints	Complete Climate Change "for" and/or "against" readings to prepare	P10
Apr 18-21	12. Conservation Biology Presentations I Four or five group presentations	15-min oral presentation, with Q&A and prop/handout	P10, CB30
Apr 25-28	13. Conservation Bio. Pres. II & Exam Review Two or three group presentations, followed by team Jeopardy on exam-related material	Remainder of presentations; HuskyCT Discussion Quiz 4, #9-11	P10, Q15
May 2-7	<i>Finals Week</i>		
		Exam IV/Final Exam (TBA)	

Point Category Key: **P** = Participation; **H** = Handout Question Page; **Q** = HuskyCT Discussion Quiz (due on Mondays); **CB** = Conservation Biology Project

- Each HuskyCT Discussion Quiz covers 2-3 Discussion topics, including material from the current week. You have approximately one week to complete these online assignments: new online quizzes will appear on Mondays and will be available only until the following Monday. You must work individually, but the quizzes are open-book and you are allowed one retake (the higher of the two scores will be recorded in the grade book).
- Following each lecture exam, time will be allotted in Discussion for review of your exam packets and the answer key. You are not allowed to remove or photograph the exams.