

## BIOLOGY 311 - Ecology

Lecture: M, TH 3:35 - 5:40 PM Room: 4104 AB

**Instructor:** Dr. Jim Cohen  
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Phone: (810) 249-4383  
Student hours: T, TH 11:15-12:20 or by appointment

**Course Objectives:** Ecology is the study of the Earth and the various processes that influence the function of the planet. This course will provide you with a framework in which to view the world, not just from an aesthetic point-of-view but also from one that is scientific, curious and critical. In class, we will discuss multiple aspects of ecology, and we will visit various types of ecosystems to understand the diversity that exists in Michigan. Through both of these experiences, you have the opportunity to gain an appreciation for the natural world, its importance, its complexity, and the interactions that humans have with the planet.

**Learning Objectives:** Upon successful completion of this course, you will understand:

- Demonstrate a comprehension of general ecological principles and components of the environment
- Demonstrate knowledge of the life-sustaining components of the environment and the impacts of changes brought about in the environment due to the activities of man
- Demonstrate knowledge of the scope and diversity of life forms in the biosphere
- Be able to analyze data and answer ecological problems

**Text:** *Ecology: The Economy of Nature 7th Ed.* by Robert Ricklefs and Rick Relyea, and additional readings may be provided.

### Grading:

Exam 1	100 points
Exam 2	100 points
Group Project	100 points
Individual Project	100 points
Participation	250 points
Final Exam (Cumulative)	150 points

**Total** **800 points**

**Make-up Exams and Late Assignments:** Turning in assignments after the deadline or scheduling a make-up exam will not be possible unless you discuss the matter with the professor at least 24 hours before the assignment is due or the test is administered. Should there be extenuating circumstances (e.g., severe illness, funeral, accident), contact me as soon as possible in order to reschedule. Should you not follow these guidelines, you will receive a zero for the assignment or exam.

**Class Behavior:** Be respectful of your classmates, and do not disturb them by talking in class, arriving late, or participating in other disruptive behavior. Furthermore, you are not permitted in class to use cellular phones, pagers, two-ways, or other similar types of devices. Remember to act as you wish others would act.

**Email Policy:** I will respond to emails within 48 hours of receiving them, but only if the email includes all of the following: subject, salutation, body, and signature. Correct spelling and grammar are expected.

## Class Schedule

Date	Lecture Topic	Reading Assignment
Oct. 1	Introduction and pre-assessment	1-28
Oct. 4	Data Collection and Statistics	Panopto videos
Oct. 8	Gold Mine Spill	32-45, 148-152, 491-494, 466-485
Oct. 11	Woody Plant ID 1	
Oct. 15	Evolution	160-183
Oct. 18	Plant Sampling 1	
Oct. 22	Invasive Species	184-197, 246-258, 366-380
Oct. 25	Woody Plant ID 2	
Oct. 29	<b>Exam 1</b>	
Nov. 1	Plant Sampling 2	
Nov. 5	Forestry - Hubbard Brook	136-148, 462-465, 494-497
Nov. 8	Population demographics	259-269, 283-289
Nov. 12	Pollination Biology	206-223, 230-245, 390-403
Nov. 15	Interspecific Interactions	316-341
Nov. 19	Disease - Parasites and Hosts	270-283, 294-303, 342-365
Nov. 22	No Class	
Nov. 26	Individual project presentations - draft	
Nov. 29	<b>Exam 2</b>	
Dec. 3	El Nino	112-135
Dec. 6	Tree Regeneration	84-108, 412-441
Dec. 10	Individual project presentations - final	

**The instructor can change the class rules at any time throughout the semester, if he deems it necessary to do so.**

### **Common Statement on Students with Documented Disabilities:**

The University will make reasonable accommodations for persons with documented disabilities. Students need to register with the Wellness Center every term that they are re-enrolled in classes. To be assured of having services when they are needed, students should contact the Wellness Center during the first week of each term. Note that it is the student's responsibility to arrange accommodations with each professor.

[http://www.kettering.edu/studentlife/docs/student\\_handbook.pdf](http://www.kettering.edu/studentlife/docs/student_handbook.pdf) (page 26)

[http://www.kettering.edu/registrar/docs/2011-12\\_UndergraduateCatalog.pdf](http://www.kettering.edu/registrar/docs/2011-12_UndergraduateCatalog.pdf) (page 46)

### **Common Statement on Ethics in the University and Academic Integrity:**

Kettering University values academic honesty and integrity. Cheating, collusion, misconduct, fabrication, and plagiarism are serious offenses. Each student has a responsibility to understand, accept, and comply with the University's standards of academic conduct as set forth in our statement, "Ethics in the University" and "Academic Integrity" as well as policies established by individual professors.

[http://www.kettering.edu/studentlife/docs/student\\_handbook.pdf](http://www.kettering.edu/studentlife/docs/student_handbook.pdf) (pages 40-42)

[http://www.kettering.edu/registrar/docs/2011-12\\_UndergraduateCatalog.pdf](http://www.kettering.edu/registrar/docs/2011-12_UndergraduateCatalog.pdf) (Page 26)