

ECOLOGY AND EVOLUTION
Biology 349/549
Syllabus
Spring 2014
Adler

Week	Topic
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INTRODUCTION 3-7 Feb	Syllabus, grading, course overview; An introduction to ecology <i>Read Chapter 1 (pp. 3-21)</i>
ORGANISMAL ECOLOGY 10-14 Feb	Population genetics <i>Read Chapter 2 (pp. 25-43)</i>
17-21 Feb	Natural selection, speciation, and extinction <i>Read Chapter 3 (pp. 45-73)</i>
24-28 Feb	Behavioral ecology <i>Read Chapter 4 (pp. 75-99)</i> Lecture Exam 1 Thursday 27 Feb.
PHYSIOLOGICAL ECOLOGY 3-7 Mar	Temperature; Water; Nutrients <i>Read Chapters 5, 6, & 7 (pp. 101-137)</i>
POPULATION ECOLOGY 10-14 Mar	Demographic techniques and population patterns; Life tables and demography <i>Read Chapters 8 & 9 (pp. 155-187)</i>
17-21 Mar	Population growth <i>Read Chapter 10 (pp. 188-216)</i> Lecture Exam 2 Thursday 20 Mar.
SPECIES INTERACTIONS 24-28 Mar	Spring break
31 Mar-4 Apr	Competition and coexistence; Facilitation <i>Read Chapter 11 & 12 (pp. 219-265)</i>

7-11 Apr	Predation; Herbivory; Parasitism <i>Read Chapters 13, 14, & 15 (pp. 267-327)</i>
COMMUNITY ECOLOGY 14-18 Apr	Species diversity; Species richness patterns <i>Read Chapter 17 & 18 (pp. 351-389)</i>
21-25 Apr	Species richness and community services <i>Read Chapters 19 (pp. 391-410)</i>
28 Apr-2 May	Succession; Island biogeography <i>Read Chapters 20 & 21 (pp. 413-444)</i> Lecture exam 3 Thursday 1 May
BIOMES 5-9 May	Terrestrial biomes; Marine biomes; Freshwater biomes <i>Read Chapters 22, 23, & 24 (pp. 447-515)</i>
ECOSYSTEMS ECOLOGY 12-16 May	Food webs and energy flow; Biomass production; Biogeochemical cycles <i>Read Chapters 25, 26, & 27 (pp. 517-579).</i> Lecture exam 4 Thursday 15 May

GRADING

Basis of grade

Undergraduate students

400 total points

4 lecture exams, 100 points each. **Lecture exams cannot be taken after the scheduled date except in the case of documented medical or personal emergencies, job interviews, etc.** In the case of legitimate absences, a make-up exam will be given but will not be the same as the regularly-scheduled exam. Exams can be taken early, in which case they will be the same as or nearly the same as the regularly-scheduled exams.

Graduate students

500 total points

4 lecture exams, **PLUS** one 10-page paper with 15 citations from the primary literature on any topic in ecology, pending my approval of the topic. The review paper will count 100 points.

Grading scale

90-100	A
80-89.9	B
70-79.9	C
60-69.9	D
<60	F

Grades of A-, B+, B-, C+, C-, D+, and D- may also be given.

TEXT

Stiling, P. 2012. Ecology: global insights and investigations. McGraw Hill, New York, NY. **REQUIRED.**

OFFICE HOURS (room HS-37, phone 424-3068, email adler@uwosh.edu)
Monday, Tuesday, Thursday 10-11 AM.