

POPULATION AND COMMUNITY ECOLOGY
BIOLOGY 376/576
SYLLABUS
FALL 2012
G. H. ADLER

Dates	Lecture	Lab
INTRODUCTION		
4-7 Sep	No meeting	Introduction and course overview
POPULATION ECOLOGY ROCKWOOD		
10-14 Sep	Populations, population descriptors, and dynamics	Field trip – constructing life tables
17-21 Sep	Demography, life tables, population growth	Field trip – seed dispersal Lab report I (5%) due 19 Sep
24-28 Sep	Life history theory	Field trip – seed dispersal
1-5 Oct	Density dependence and independence; population limitation	Field trip – seed dispersal
8-12 Oct	Population limitation	Field trip – seed dispersal
15-19 Oct	Metapopulations, review	Field trip – seed dispersal;
COMMUNITY ECOLOGY MORIN		
22-26 Oct	Mutualism; competition: patterns	Field trip – seed dispersal; Lecture exam I (30%) due 24 Oct
29 Oct-2 Nov	Competition: patterns Competition: experiments	Introduction to data analysis Lab report II (15%) due 31 Oct
5-9 Nov	Competition: experiments	Discussions
12-16 Nov	Predation, parasitism	Discussions Lap report III (10%) due 14 Nov
19-23 Nov	Habitat selection; the niche; community structure	Thanksgiving

26-30 Nov	Island biology	Discussions
3-7 Dec	Mathematics in ecology	Discussions
10-14 Dec	Applications	Lecture exam II (30%) due 14 Dec

Grading will be based on the following criteria:

Lecture exam I (take-home)	30%
Lecture exam II (take-home)	30%
Lab reports (3)	30%
Participation in lab discussions	10%

Grading scale

90-100%	A
80-89%	B
70-79%	C
60-69%	D
<60%	F

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

Lecture exams will be take-home exams, will be written in **essay format**, and should incorporate information from lecture notes and **primary research articles**. Such articles should be **cited properly** (i.e., according to the format used in the journal *Ecology*). Undergraduate students will answer two of the questions, while graduate students will answer four of the questions.

Lab reports will consist of written reports based on results obtained in lab.

Lab discussions will focus on critiquing current papers according to criteria outlined in a handout.

Office: HS-37, phone 424-3068, email adler@uwosh.edu

Office hours: Monday, Wednesday, Friday 9-10 AM. If I am unavailable during office hours, you can make an appointment or just stop by.

Text books: 1) Rockwood, Introduction to population ecology.

2) Morin, Community ecology (new edition). **BOTH ARE REQUIRED**