

**Office:** 410 Carr Hall; Office Hours: TH: 10:50-12:15.

**Philosophy of Course:**

“Study Nature, Not Books.”

Theory-dependency

**My lecture style:**

- Use chalk on the board - Less material more in depth mixed with power points
- Organize lectures around questions and concepts.
- Ecology in action segments

**Discussions of Papers:**

-Read the papers through, but think about major lesson and take home lesson and whether or not that was supported by the data. We are not going to be critical of the methods.

What is the major point?

What is the hypothesis?

How was that tested?

What are the results?

What are the implications of the results?

**Tests:**

- 1.5 hours
- 10 multiple choice, 10 fill in the blank, 10 matching, 1 short answer and one essay

**Focus on different levels of learning:**

Tests designed to Challenge you with A, B and C level questions.

Ecologists, unlike medical doctors, are never under the clock, so your tests will not be either (for the most part).

*Facts:* Regurgitation

*Synthesis:* Known Facts to explain Known concepts

*Critical Thinking:* Known facts combined with new facts to make new ideas

**Missed assignments and tests:** Without a Doctors note, a zero. Its fair to everyone. For the lab, it's a zero or letter grad per day late.

**Grading:**

1. Third Midterm: 15%
2. Fourth Midterm: 15%
3. For each discussion paper assignment,  $\frac{1}{2}$  of a bonus point will be added to your total test score (midterm 3 and 4) for a satisfactory homework that is turned in on time. 4 pts possible.

**Marine Ecology Class in Spring: Overview**

**Course Objectives:**

1. Learn important facts about Ecology.
2. Ensure students have a basic understanding of what Ecology, Evolution and Science are.
3. Ensure that students can find, understand, and critique primary literature in Ecology.
4. Convey to students the importance of Creativity, Motivation, Patience, Persistence, and Observation in Science and Ecology.
5. Empower students to do science and think independently in any field.
6. Teach students to be synthesizers and critical thinkers.
7. Teach students to convey effectively their scientific thoughts and analyses in writing.
8. Teach students how to do Science and Ecology.

<u>Date:</u>	<u>Lecture:</u>	<u>Chapters:</u>	<u>Assign.</u>
T, Oct 14	INTRO; Sex & Sociality	11, 12, 13	
Th, Oct 16	Sex & Sociality; Population Ecology I		
T, Oct 21	Population Ecology II	14,15, 16	Bertness et al 1998 (8)
Th, Oct 23	Competition		
T, Oct 28	Competition II	17, 18, 19	Bertness 1991 (2)
Th, Oct 30	Predation		
T, Nov 4	Exam 3		
Th, Nov 6	Predator-Prey & CoEvolution.		
T, Nov 11	No Class	20, 21	
Th, Nov 13	Positive Interactions		Altieri et al 2007 (7)
T, Nov 18	Food Webs	22, 23	Estes & Palmisano 1974 (1) Estes et al 1998 (10)
Th, Nov 20	Disturbance Ecology		Silliman et al 2005 (6)
T, Nov 25	Island Biogeography		
Th, Nov 27	No Class	24	
T, Dec 2	Community Structure	25, 26	Bruno et al. 2002 (4)
Th, Dec 4	Biodiversity & Conserv.		Halpern et al 2007 (5)
T, Dec 9	Exam 4		
Th, Dec 11	Class Finished		

NUMBERED READING ASSIGNMENTS FOUND ON MY WEBSITE AT :  
[http://www.sillimanlab.com/courses\\_PCB4044.php](http://www.sillimanlab.com/courses_PCB4044.php)