

PCB 3043 - ECOLOGY
Syllabus - Fall 2003

Time: MW 17:00 - 18:15

Place: CP 151

Professor: Dr. Maureen A. Donnelly

Office: OE 239

Office Hrs: M 1400-1700, other times by appointment

Email: donnelly@fiu.edu

Website: <http://www.fiu.edu/~donnelly/ecology.htm>

Date	Day	Lecture Number/Topic	Reading
25 Aug	M	1. Introduction	Ch 1
27 Aug	W	2. Physical Environment & Climate	Ch 2,4
1 Sep	M	LABOR DAY HOLIDAY - NO CLASS	
3 Sep	W	3. Physical Environment & Climate	Ch 2,4
8 Sep	M	4. Physical Environment & Climate	Ch 2,4
10 Sep	W	5. Biomes	Ch 15
15 Sep	M	6. Biomes	Ch 15
17 Sep	W	7. Populations	Ch 13
22 Sep	M	8. Populations	Ch 13 & 14
24 Sep	W	9. Populations	Ch 14
29 Sep	M	10. Populations	Ch 15
1 Oct	W	HOUR EXAM 1 (lectures 1-9)	
6 Oct	M	11. Populations	Ch 15
8 Oct	W	12. Interactions - Herbivory	Ch 17
13 Oct	M	13. Interactions - Predation	Ch 18
15 Oct	W	14. Interactions - Competition	Ch 19
20 Oct	M	15. Interactions - Disease & Parasites	Ch 20
22 Oct	W	16. Interactions - Coevolution	Ch 20
27 Oct	M	17. Communities	Ch 21
29 Oct	W	18. Communities	Ch 22
3 Nov	M	19. Communities	Ch 22
5 Nov	W	HOUR EXAM 2 (lectures 10-18)	
10 Nov	M	20. Communities	Ch 23
12 Nov	W	21. Communities	Ch 23
17 Nov	M	22. Ecosystems	Ch 6
19 Nov	W	23. Ecosystems	Ch 6
24 Nov	M	24. Ecosystems	Ch 7
26 Nov	W	25. Ecosystems	Ch 8
1 Dec	M	26. Conservation	Ch 25
3 Dec	W	27. Conservation	Ch 26
10 Dec	W	FINAL EXAM (lectures 19-27) -- 1530 - 1815 hr	

*****Last Day to Drop with a Grade of DR is 18 October 2003*****

Syllabus: The syllabus is an outline of what I will cover during the semester. My exams are based on the lecture material and lecture outlines are posted on the website as html or PDF files. The readings pertaining to a particular topic are indicated for the required text.

Email and the World Wide Web: You must get an individual email account (they are free to FIU students --> go to the computer labs on campus to sign up and learn the system) and you must also have access to the World Wide Web (again, these services are available for free to FIU students in the computer labs on both campuses). My page is easily navigated using any web browser. Grades,

answer keys, lecture notes, and other information you will need during the semester will be posted on the webpage.

Textbook: Ricklefs, R.E. 2001. *The Economy of Nature* - Fifth Edition. W.H. Freeman. There is a website associated with the textbook: <http://www.whfreeman.com/ricklefs5e/>.

Homework: One homework assignment will be given during the first week on the website.

Assignment one must be completed by midnight 2 September 2003 or you will be dropped from the course (you will receive an administrative drop).

Writing Assignment: You will be required to turn in a written assignment on an ecological theme and the assignment includes 4 parts. You will select a theme and have it approved by **15 SEPTEMBER 2003** via email. You will send me an email message that describes the ecological theme. Once you have an approved theme, you will find 10 scientific papers related to that theme from the primary scientific literature. On **8 OCTOBER 2003** the second part of the writing assignment is due. You will turn in a typed alphabetized list of the 10 selected papers and the front page of each article (11-12 pages maximum). Three of the 10 papers must be from the journals *Ecology*, *Ecological Monographs*, or *Ecological Applications*. **YOU MUST USE PRIMARY SCIENTIFIC LITERATURE (JOURNALS)**. I will post an example of the format for the bibliography on the website. The second part of the assignment is worth 10 points. The third part of the assignment is due by **22 OCTOBER 2003** via email. You will select three papers from the list of 10 and send me an email message with the titles of the three papers. The third part of the assignment is worth 5 points. **LATE ASSIGNMENTS WILL NOT BE ACCEPTED FOR PARTS ONE THROUGH THREE, YOU WILL GET A ZERO IF YOU ARE LATE.** The largest part of the assignment is due on **19 NOVEMBER 2003**. The last part of the writing assignment includes a two page critique (double spaced - 12 point font minimum) of each of the selected papers (10 points per critique, 30 points total -- examples of critiques will be posted on the web).

You will also answer the following four questions: Include the question on each page (single spaced) and the answer (double spaced, 12 point font minimum):

1. What ecological theme unites the papers you selected? (10 points - one page maximum)
2. What hypothesis or hypotheses did each study examine? (15 points - three pages maximum)
3. What paper did you like best and why did you like it? (10 points - three pages maximum)
4. Based on the results presented in the three papers you selected, what ecological study would you conduct to advance the research theme? (15 points - 5 pages maximum)

The writing assignment should not exceed 18 typed pages. If you are late, I will subtract five points per day (5 pm).

Exams: I will give three 100 point exams during the semester. The exams will include 40 multiple choice questions (2 points each; 80 points total) and one essay question (20 points). The essay will be graded based on content (15 of 20 points) and presentation (5 of 20 points). The exam and answer sheet will be provided. **NO MAKE-UP EXAMS WILL BE GIVEN. BRING A FORM OF PHOTO ID AND AT LEAST TWO SHARPENED NO. 2 PENCILS TO EVERY EXAM. NOBODY WILL BE ALLOWED TO START TAKING THE EXAM AFTER THE FIRST STUDENT HAS FINISHED, TURNED THE EXAM IN, AND LEFT THE ROOM.**

Grades: Grades are based on a percentage of total points (90%, 80%, 70%, etc.). Grades are based on 400 points (i.e., A: 360-400, B: 320-359, C: 280-319, D: 240-279, F: < 240). When you complete assignment one, I will send you an email message with a code number. Your code number is a random number and grades will be posted according to random numbers. You will be able to determine your standing any time during the semester.

Learning Outcomes: Students leaving PCB 3043 understand climate, the distribution of biomes, the physical and biological forces that act on organisms; population structure and function; community structure and function, an introduction to ecosystems, and an introduction to conservation.

Code of Conduct: Students in PCB 3043 are expected to adhere to the FIU Student Code of Conduct (www.fiu.edu/~jms, follow link to student code of conduct). Cheating and plagiarism are violations of the academic honesty section of the code of conduct and will be reported to Judicial Services. Cheating means one provides an answer obtained from someone else, and plagiarism means one copies directly from a source without acknowledging the source.