

BIOLOGY 3800: PRINCIPLES OF ECOLOGY

Fall 2010

Lecture: MW 1500-1615 LFS 2080 **Lab:** Tuesday 1100-1350 or 1400-1650 or Thursday 1000-1250 lab sections are in LFS 1071. NOTE: Students in Tuesday afternoon or Thursday labs will have Mrs. Yeager as their instructor.

INSTRUCTOR: Robert Colombo, Ph.D. **OFFICE:** LS 2027 **PHONE:** 581-6653 **OFFICE HOURS:** MWF: 0900-1000, or by appointment. **E-MAIL:** recolombo@eiu.edu

TEXTS: (1) Lecture – Molles, M. C., Jr. (2010) *Ecology: concepts and applications*, 5th ed., McGraw-Hill.

(2) Laboratory - Brower, Zar, and von Ende (1998) *Field and Laboratory Methods for General Ecology*, 4th ed., W.C. Brown.

RATIONALE: Biology 3800 is an introduction to the science of ecology, the study of the interrelationships of living organisms with their biotic and abiotic environments. Ecology is the most encompassing and dynamic of the biological sciences as it deals explicitly with the highest levels of biological organization.

OBJECTIVES: (1) To provide a solid introduction to the science of ecology, especially its principles and applications.

(2) To provide an understanding of how ecological information is gathered, analyzed, and interpreted.

(3) To provide a basis for judging the quality and soundness of ecological information.

GRADING: The course grade will consist of both lecture and laboratory components. The lecture portion of the course will count for 50% of your grade and the lab, the remaining 50%. Your grade will be based on the total number of points you earn, with >90% = A, 80-89% = B, 70-79% = C, 60-69% = D, and <60% = F. Points from the lecture portion of this course may be earned in the following categories:

Item	Max. Possible Points
2 Hour Exams (100 pts. each)	200
<u>Comprehensive</u> Final Exam (lecture)	200
Total	400

Note that another 400 points can be earned from laboratory assignments (lab reports, papers, exams, etc.). Details concerning these assignments will be outlined in lab, and will vary among the different lab sections.

Exams: Lecture exams will be comprised of short answer, matching, multiple choice and essay. Material for the exams will be derived **EXCLUSIVELY** from the **LECTURES**. **THE FINAL EXAM WILL BE COMPREHENSIVE**. Missing an exam without prior consent from the

instructor will result in a grade of ZERO for the exam. Make-up exams will ***not*** be given. Students who miss an exam for a valid reason (illness, death in the immediate family) will have points for that exam ***added to their final exam points*** (thus, if you miss one exam for a valid reason, your final exam will then be worth 300 points).

Policy on class attendance: Class attendance is entirely optional (you've paid your tuition...). However, if you choose to attend class (and I hope that you do!), please be on time, be quiet so that everyone can hear, turn cell phones, etc. off, and wait until I end my lecture before beginning to pack up your things. Lab attendance is mandatory.

LECTURE SCHEDULE

Week/date	Topic	Text Chapter
1	Introduction & basic definitions: what is ecology?	1
1, 2	Natural history: life on land, life in water	2,3
3, 4	Ecology of individuals: temperature, water, energy relations	5-7

Exam I Wed Sept. 22

5-7	Population ecology: distributions, dynamics, growth	9-11
8-12	Interactions: competition, predation, mutualism	13-15
8-12	Interactions: competition, predation, mutualism, cont.	13-15

Exam II Wed Nov. 10

13	Community & ecosystem ecology: species diversity, food webs	16, 17
13	Community & ecosystem ecology (cont.): succession, primary production, etc.	18, 20

Nov 22-26 THANKSGIVING RECESS

14, 15	Community & ecosystem ecology (cont.): nutrient cycling, succession, and Large-scale ecology	18, 19
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Dec 16 (Tuesday) COMPREHENSIVE FINAL EXAM (1445-1645)

Academic integrity:** “It is assumed that students will honor the tradition of academic honesty. Should incidents of suspected classroom cheating or plagiarism occur, however, the following steps will be taken:

1. The instructor who has witnessed academic dishonesty or who has other evidence that academic dishonesty has occurred will confront the student to inform him/her of the allegation. Time permitting; the instructor will contact the Office of Student Standards prior to talking with the student. If the student admits the violation, the instructor will assess an

appropriate academic penalty and will inform the Office of Student Services using a Notation of Academic Misconduct form.

2. If the student disputes the allegation, or if a sanction greater than a failing grade for the course is warranted, a hearing will be provided by the Office of Student Standards in accordance with provisions of the Student Conduct Code. If as a result of the hearing the student is found responsible for the violation, the instructor will assess an appropriate academic penalty. Other sanctions such as disciplinary probationary status or separation from the institution can be imposed by the University's disciplinary system. Full conditions and explanations are cited in the Student Conduct Code. A student accused of academic dishonesty in a course may not drop the course until such time as disciplinary action, if any, is concluded. A grade (A, B, C, D, F, CR, NC, AU, I, W, X) may be changed to reflect the disciplinary sanction, if any, imposed as a result of academic dishonesty. In the event that the alleged violation occurs at the end of a term, no grade shall be assigned pending conclusion of the disciplinary process. All students are subject to the provisions of the University's Student Conduct Code, available online at www.eiu.edu/~judicial.**

** from http://catalog.eiu.edu/content.php?catoid=17&navoid=435#acad_inte

SPECIAL NOTE: If you have a documented disability and wish to discuss academic accommodations, please contact the *Office of Disability Services* at 581-6583.

ALSO: Career Services: 581-2412 Learning Assistance Center: 581-6696
 Counseling Center: 581-3413 Writing Center: 581-5929