BIOL 304 – GENERAL ECOLOGY (Fall 2001)

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Office Hours: Wed. 9:00-11:00 am, Thur. 1:00 – 3:00 pm10:50 am - 12:05 pm T, R
Natural Sciences Room 523

<u>Textbook</u>

Smith, R. L. and T. M. Smith. 2001. *Ecology and Field Biology*. (6th ed.). Benjamin Cummings, Inc., NY, NY.

Course Description

This course provides students with a general introduction to some of the structural and functional components of nature. Ecology as a science involves the study of interactions between organisms and their environment. Ecological investigations are often empirical in nature, and involve hypothesis testing through observation or experimentation. We will consider data generated from such investigations throughout the semester, and analyze whether these data support or refute current ecology theories. It is important that you gain a perspective of the concepts involved in ecology, their limitations, and their strengths. This is not a class of memorization. Interactions between organisms and their environment can take place at many different levels, and as such, we will consider these interactions beginning with the individual organism, progressing to populations, followed by communities, and concluding with ecosystems.

Grading Policy

There will be three exams given during the semester and a comprehensive final exam. Each exam will focus on the most recently covered sections of material (since the last exam) and exam questions are primarily derived from topics covered in lecture (unless otherwise indicated). Each exam will be announced at least one week prior to the exam date. Exams will consist of some combination of short answer, matching, fill in the blank, and essay questions. Also, all questions will come from lecture material and information in the textbook. Acts of dishonesty are not acceptable and will be dealt with appropriately. There will also be two reading-discussion projects. There is no possibility for extra credit projects. The point values are as follow:

		<u>Grading Scale</u>		
Exam 1	100 points	А	90-100%	450-500 points
Exam 2	100 points	В	80-89%	400-449 points
Exam 3	100 points	С	70-79%	350-399 points
Final Exam	150 points	D	60-69%	300-349 points
Reading-Discussion	-	F	0-59%	0-299 points
Projects (2@ 25 pts.)	50 points			-
Total Points	500 points			

Missed Examinations

Missed exams must be taken within one week of the scheduled exam. If you miss an examination for medical reasons, please give the instructor a written statement to that effect signed by the attending physician. If you missed an examination for non-medical emergency, submit to the instructor the appropriate written documentation of the emergency. Make-up exams will be given in any format. **Excuses will be accepted only up to one week following the missed examination.**

<u>Reading – Discussion Projects</u>

For each Discussion Project, a current topics paper from an ecological journal will be assigned for everyone to read (article to be on reserve at the library). Each student will write a 1-2 page summary of the paper to be handed in on the day of the discussion. The details of the summary report will be given in a handout later in the semester. On the day of the discussion, everyone will take an individual quiz over the material covered in the paper. Then, students will break out into groups to discuss the results and ideas of the paper while answering questions in a group quiz. We will end the project with a class discussion of the issues.

Academic Dishonesty

Academic misconduct includes cheating (using unauthorized materials, information, or study guides), plagiarism, falsification of records, unauthorized possession of examinations, intimidation, and any other action that may improperly affect the evaluation of your performance. It also includes assisting others in any such acts or attempts to engage in such acts. Penalties may range from grade penalties (including lowering a student's semester grade or failing a student for the course) to disciplinary action from the University's Academic Misconduct Board (see the Student Handbook pages 72-74).

Attendance Policy

I strongly encourage (but do not require) your attendance at lecture. Although your attendance record is not calculated into your overall course grade, students having several absences usually do not perform well on exams. If you miss a lecture, find someone in class to tell you what you missed or see me. Please avoid habitual tardiness, this is a disruption to the class. To excel in this class requires a minimum of two hours of study outside of class for every hour of lecture.

Cell Phones and Beepers

Please turn off all cell phones and beepers when coming to class. Better yet, leave them out of the classroom. This is a common courtesy folks. Classroom distractions such as this only disrupt the flow of learning and the delivery of subject information.

Tobacco Products

No tobacco products of any type (cigarettes, snuff, chewing tobacco, etc.) are allowed in or during class. Another courtesy.

A note for students with disabilities:

If you have a disability that may prevent you from fully demonstrating your abilities, you are encouraged to contact the Services for Students with Disabilities Office (572-5180). Also, please contact me as soon as possible to discuss any accommodations that might be necessary to ensure your full participation and to facilitate your educational opportunities.

<u>Remember, it is your responsibility to attend class, study, and fully understand the material presented in this course!</u> An outline of topics to be covered is given below.

<u>NOTE</u>: This syllabus is subject to change at the discretion of the instructor.

	TENTATIVE	LECTURE	SCHEDULE
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PAI	RT DATES	LECTURE	TEXTBOOK READING		
1	Aug. 21, 23 Aug. 28, 30 Sept. 4, 6, 11, 13 Sept. 18	History of Ecology, Physical Environment Adaptations EXAM 1	Chapter 1 Chapters 2, 3 Chapters $5-8$		
2	Sept. 20, 25 Sept. 27, Oct. 2 Oct. 4, 11, 18 Oct. 9	Population Ecology Competition, Life History Patterns Foraging: Predation and Herbivory Group Discussion Reading 1	Chapters 10, 11 Chapters 12 – 14 Chapters 15, 16 To be announced.		
	Oct. 23	EXAM 2			
3	Oct. 25, 30 Nov. 1, 6 Nov. 13 Nov. 8 Nov. 15	Community Ecology Succession Landscape Ecology Group Discussion Reading 2 EXAM 3	Chapters 20, 21 Chapter 22 Chapter 23 To be announced.		
4	Nov. 20 Nov. 27, 29 Dec. 4 Dec. 6	Ecosystem Ecology Nutrient Cycling and Human Impacts Biogeography Global Change	Chapter 24 Chapters 25, 26 Chapter 27 Chapters 32		
Thursday Dec.13, 10:10 am - 12:10 pm FINAL EXAM - comprehensive					