G4980 **ESP 125K Introduction to Environmental Ecology** **Spring 2006**

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Office Hours: M/W 11 AM to Noon, Th. 1-2 PM, & Fri. 9-10AM, & by arrangement

Lecture: M/W 9:30- 10:45 PM, Room 217, John Mitchell Center

Lab Co-requisite ESP 126K: W 1:00-4:00 PM, with Dr. Anne K. Hewes (Refer to ESP 126 syllabus for lab information.)

Text: MacKenzie, A., A.S. Ball, S.A. Virdee. 2001. Instant Notes in Ecology, 2nd edition. BIOS Scientific Publishers.

Course Description: This course is an introduction to the study of interactions between organisms and their environment. Students will learn the basic principles of ecology, while applying the interdisciplinary framework of environmental science to study specific ecosystems such as forests, wetlands and urban areas.

Course goals for the student

1. Be able to describe the basic types of ecology that are used in environmental ecology.
2. Be able to describe basic ecological principles and concepts.
3. Be able to apply ecological principles and concepts to address environmental management problems.

Ancillary skills goals

1. Improve ability to access and critically evaluate ecological information.
2. Improve abilities in self-teaching and learning about environmental science.
3. Improve independent organizational and problem-solving skills for complex, interdisciplinary problems

On-line support: This course has a Blackboard site for materials, communications, announcements, discussions, and other course support activities. The Blackboard site for this class may be found at http://www.courses.maine.edu. All students are expected to access this site and use it. The following link presents a quick guide for students new to Blackboard: http://www.learn.maine.edu/crs/bb5_guide.html. Some of the course readings are posted on Blackboard or have their URL links at the Blackboard site.

Attendance and participation: Absences will be excused for legitimate reasons if you either notify the instructor in advance or as soon as possible (e.g., deadly road conditions, illness, emergency). Most of the course grade is not based on exams, so class attendance is particularly important for the student's grade. Late assignments are only accepted at the discretion of the instructor and at the loss of a letter grade.

Integrity and civics: In accordance with USM policy, students are expected to do their own work and not appropriate or plagiarize the works of others. Proper behavior is expected in the classroom setting and when in the field. Be sure to turn off cell phones when in class—let me know if this is a problem.

Homework: Read the assigned text sections and Blackboard postings by the indicated dates. Write a 4-page critique of a current ecology journal article found in the USM library. Weekly basis: write a one-page reaction to the week's readings/topics, which will be due weekly. Each student will research in advance on the case studies. Use Blackboard to post comments and queries about the readings/topics/case studies.

Grading:	Homework, Quizzes:	35%
	Mid-term Exam:	20%
	Final Exam:	20%
	Participation:	25%

Performance is summed as a percentage of 100 in accordance with the following:
A: Excellent work.. Aggregate 90 to 100% performance on tests & assignments. Quality participation, writing, research, and analytical skills. Superior documentation shows significant learning and mastery of course content.
B: Good work. 80% or better performance on tests and assignments. Good writing, research, analytical skills. Work shows good development of ideas and thorough support of analyses. Student has a significant understanding of fundamental site planning and assessment.
C: Acceptable. College-level work at the 70% or better level. Demonstrates reasonable organization, good clarity, and a basic understanding of the fundamentals of site planning and assessment.
D: Marginal work. Meets minimal requirements to not fail the course. *Has three or more unexcused absences.*

Adaptations and accommodations If you have questions or concerns about your academic performance at any time throughout the semester please do not hesitate to contact me. The Americans with Disabilities Act of 1992 mandates the elimination of discrimination against persons with disabilities. If you need course adaptations or accommodations because of disability please contact the Office for Students with Disabilities, 2nd floor Luther Bonney Hall (780-4706; TTY 780- 4395). Please let me know if you have a home situation, work requirements or other factors that affect your ability to attend class and do the project.

Date	**Topics*** - *subject to change*	**Assignment/Text Readings**[1]
1/18	Introduction, Terrestrial Ecology	Section A
	Week 2	
1/23	Terrestrial Ecology: Abiotic Influences on Organisms	E, X
1/25	Marine Ecology	C
	Week 3	
1/30	Marine Ecology	D Select journal article

[1] Additional readings from outside the text may be announced & posted on Blackboard

2/1	Landscape Ecology	F
	Week 4	
2/6	Landscape Ecology	G
2/8	Case study: Casco Bay	S
	Week 5	
2/13	Case study	Draft critique
2/15	Population Ecology, Predation	H, J
2/20 2/22	*Winter Break – no class* *Winter Break – no class*	
	Week 6	
2/27	Wildlife Ecology, Competition	I,M
3/1	Biodiversity	,N
	Week 7	
3/6	Journal article critiques	critiques
3/8	Human Ecology, Management Concepts	
	Week 8	Section V
3/13	Industrial Ecology	
3/15	Urban Ecology	Section W
	Week 9	
3/20	**Mid-term Exam**	
3/22	Maine Water Conference--Augusta	
3/27 3/29	*Spring Break – no class* *Spring Break – no class*	
	Week 10	
4/3	Freshwater Ecology, Ecological Communities	Section Q
4/5	Case Study: The Everglades	Section U
	Week 11	
4/10	Systems Science	Section P
4/12	Systems Science	
	Week 12	
4/17	Forest Ecology, Habitat and Niche	Section B
4/19	Forest Ecology	
	Week 13	
4/24	Independent work: No class	

4/26	Wetland Ecology, Ecosystems	Section R
	Week 14	
5/1	Case study: Chesapeake Bay	Section T
5/3	Case study	
5/10	**Final Exam Wed. May 10th from 10:45-12:45 (period 5)**	

***Note:** Due to seasonal considerations, it is not always possible to match the lecture topics of ESP 125 to the lab topics of ESP 126. Please pay careful attention to both syllabi!