

GEOGRAPHY 370
ENVIRONMENTAL AND NATURAL RESOURCE CONSERVATION
FALL 2008

Tu/Th 9:30-10:45 (Section 1)/2:00-3:15 (Section 2)

GENERAL INFORMATION:

Instructor: Kathleen Farley, Ph.D.
Office/Phone: Storm Hall 313, 594-8472
Email: kfarley@mail.sdsu.edu
Office hours: Tues 3:15-4, Wed 1-2, or by appointment
Required text: Jay Withgott and Scott Brennan. 2008. Environment: The Science Behind the Stories, 3rd edition. San Francisco: Pearson Benjamin Cummings. (referred to as “text” in course schedule)
Prerequisites: Geography 101 or 102
Blackboard: There is a Blackboard website for this class, which will have copies of this syllabus, copies of course assignments, additional readings, and class announcements

COURSE OVERVIEW:

The relationship between people and the environment is fundamental to the functioning of our society. We depend on natural resources for everything from the production of food to the provision of water. At the same time, our activities and choices, including the kinds of products we buy and the kind of transportation we use, will influence how well the environment supports our society into the future. In order to manage natural resources effectively, we need to develop an understanding of the science behind the systems we are trying to manage as well as an understanding of how environmental and societal priorities interact in the effort to translate that science into policy.

The first part of the course will be divided into 5 broad environmental themes: energy, water, air, soils, and biological diversity. The second part of the course will focus on approaches to environmental management and conservation. By the end of the semester I hope that you will be able to:

- understand the major management and conservation issues associated with energy, water, air, soils, and biodiversity
- identify and differentiate among approaches to environmental management and conservation
- evaluate critically the ways in which information on the environment is communicated and discussed
- analyze complex environmental problems and issues
- distinguish among conservation strategies and recognize them in their application
- articulate your own reasoned positions on environmental issues
- value environmental science as a basis for developing informed opinions and policies on environmental issues
- work effectively in groups and collaborate with classmates

GRADING:

Grading for the class will be divided as follows:

- 2 mid-term exams: 100 points each (200 points total)
- 3 assignments: 50 points each (150 points total)
- In-class participation and presentations: 50 points total
- Final Exam : 100 points
- TOTAL: 500 points

HELP AND FEEDBACK:

Office hours are intended to provide individual help, discuss problems or interests, or just to get acquainted. I am more than happy to work with you during these times or, if my office hours conflict with your schedule, at other times. Please don't miss out on getting help because you are reluctant to ask for it. I also invite you to provide comments or suggestions about the course, its content, the way and pace at which the information is presented, the exams, or other course issues.

ASSIGNMENTS:

1. Assignments #1-2, article critiques: Over the semester, each student will write reviews of 2 assigned articles related to the environmental themes and/or to the approaches to conservation discussed in class. These assignments will contribute to several of the goals of this class; in particular, they are intended to foster your ability to critically evaluate the ways in which information on the environment is communicated.
2. Assignment #3, take-home assignment: This assignment will be handed out at the end of class on November 20 and should be submitted by e-mail on November 25. We will not have a class meeting on November 25, so this assignment will take the place of that class.

IN-CLASS PARTICIPATION AND PRESENTATIONS:

- Over the course of the semester, groups of students will be responsible for giving short presentations. These will include presenting synopses and interpretations of readings or videos as well as overviews and interpretations of fieldtrips. There will also be a number of group activities done in class which will be included in this grade.

CLASS POLICIES:

1. **Exams:** You are responsible for all information covered in lecture, including guest lectures, videos, podcasts, and other types of presentations, as well as reading assignments. Exams will include multiple choice, short answer, and essay questions. Mid-terms will focus on the material covered since the previous exam; however, they also may draw on material covered earlier in the semester. The final exam will be cumulative. No make-up exams will be given.
2. **Readings:** You are responsible for doing all readings prior to class and for coming to class prepared to discuss them. In addition to the readings noted in the schedule,

students are responsible for occasional supplemental readings that will be assigned during the semester.

3. **Assignments:** All assignments must be typed, with 12 point font and 1 inch margins on all sides. They should be printed double-sided, if possible. Hand-written or improperly formatted assignments will not be accepted. Points will be deducted for grammatical and spelling errors. Assignments must be turned in at the beginning of class on the due date.
4. **Late assignments:** Full credit for late assignments will only be given in case of documented illness or another valid, documented reason. Twenty percent will be deducted for each day that an assignment is late; after one week, no late assignments will be accepted.
5. **Attendance:** I do not take formal attendance, but there will be some in-class exercises, done either individually or in groups, and you must be present in order to receive credit for those exercises.
6. **Special accommodations:** If you will need special accommodations due to a documented disability, or if you will miss class due to participation in a university-sponsored sport, due to a religious holiday, or for another documented and valid reason, you must let me know within the first two weeks of class.
7. **Cheating:** Cheating, including plagiarism, is not acceptable. Any student caught cheating will receive a grade of zero on that exam or assignment and will be reported to the Center for Student Rights and Responsibilities. If you have any doubts or questions about what constitutes plagiarism, please ask me, or see this website: http://wps.prenhall.com/hss_understand_plagiarism_1/0,6622,427064-,00.html
8. **Schedule:** The schedule is subject to change; topics may be covered on a different day than scheduled.

SCHEDULE:

DATE	TOPIC	READING
2 Sept	Introduction	
4 Sept	Perceptions of the environment, sustainability, and the scientific method	text: ch.1 and pp.674-5
ENVIRONMENTAL THEMES & ISSUES		
9 Sept	Energy basics, the carbon cycle, energy from fossil fuels	text: ch.19
11 Sept	Global climate change	text: pp.504-516
16 Sept	Global climate change: effects and responses	text: pp.516-539
18 Sept	Alternative sources of energy Assignment #1 due	text: pp.575, 579 (table), 588-598 and ch.21
23 Sept	Watersheds, the hydrologic cycle, water resources	text: pp.412-429
25 Sept	Water quantity: water in California	*Archibold, 1/1/07 review: http://www.20gallonchallenge.com/supply.html#supplyreliability

30 Sept	Water quantity: water in California: FIELDTRIP TO WATER CONSERVATION GARDEN	*Archibold and Johnson, 4/4/07 review: http://www.thegarden.org/history.html
2 Oct	Water quality and water pollution	text: pp.429-439
7 Oct	Midterm #1	
9 Oct	The atmosphere; air pollutants; CO ₂ as a pollutant	text: ch.17 (pp.473-488) *Kintisch, 9/8/06
14 Oct	Types of air pollution: ozone depletion, acid deposition	text: ch.17 (pp.488-495)
16 Oct	Air pollution in southern California	*Barringer, 8/3/05 *A.P., 8/9/07
21 Oct	Soil formation and soil erosion	text: ch.9 (pp.233-243)
23 Oct	Desertification and salinization	text: ch.9 (pp.244-258)
28 Oct	What and where is biodiversity? Assignment #2 due	text: ch.11 (pp.294-301) *Zimmer, 3/6/07
30 Oct	The value of biodiversity	text: ch.11 (pp.301-323)
4 Nov	Threats to and protection of biodiversity	*Dean, 9/5/06 *Zimmer, 1/23/07
6 Nov	Midterm #2	
APPROACHES TO ENVIRONMENTAL MANAGEMENT & CONSERVATION		
11 Nov	Veterans Day – NO CLASS	
13 Nov	Conservation vs. preservation; resource management	text: pp.26-37 and pp.329-331
18 Nov	Parks and other protected areas: FIELD TRIP TO MISSION TRAILS REGIONAL PARK	text: pp.348-353
20 Nov	Policy and legislation	text: pp.57-83
25 Nov	Economic approaches: conservation easements: NO CLASS MEETING, take-home assignment (Assignment #3) due by e-mail by the end of the regular class meeting time	*Lucas, 9/27/04 *Lee, 9/20/05 *Archibold, 11/5/06 *Seelye, 7/3/03
27 Nov	Thanksgiving – NO CLASS	
2 Dec	Economic approaches: markets and ecosystem services	text: pp.37-52 *Daily et al. 2000
4 Dec	Alternative and “green” production and consumption	*Williams, 7/1/07 Pollan: pp.239-261
9 Dec	The land ethic and deep ecology	Leopold: pp.239-51
11 Dec	Environmental action	text: pp.658-671
18 Dec	FINAL EXAM:	
16 Dec	10:30-12:30 (SECTION 1) 1:00-3:00 (SECTION 2)	

*available on Blackboard