

AGLY 103: Environmental Earth Science
4 credit hours; Tentative Syllabus, Summer I, 2001

Instructor: Karin L. Willoughby, Office #207, Science Bldg.
Office Hours: Monday thru Friday 9:30 - 10:00 am; and by appointment.
Time: 10:00 am - 1:10 pm, Monday thru Friday.
Text: Environmental Geology, Edward A. Keller (K)
Lab Manual: Environmental Issues, Astwood and Carpenter (A&C)
Field Trips: shoes and clothing suitable for walking outdoors is required.

This course is designed to acquaint you with major aspects of human interaction with the earth. Natural hazards caused by earth processes, the effect of these hazards and the effect of human actions on the earth are all explored. Geologic information will be used to study complex environmental problems. To be successful, you will need to acquire knowledge about how the earth works, build your ability to understand environmental issues, practice decision-making skills for choosing among alternative environmental solutions and communicate that knowledge and understanding to others in oral and written form.

Grading: Lecture -- 75% of class grade

Maximum possible points: 450 pts (150 each) on three exams
+ 120 pts. team presentation and references
150 pts. comprehensive final exam
30 pts. class participation, including attending regularly,
on time and contributing pertinent comments on
_____ environmentally significant issues
750 pts. Subtotal

Laboratory -- 25% of class grade*

Maximum possible points: 100 pts (50 each) on two 2-3 page, typed, double-spaced
papers
+ 120 pts. on 10 lab and field trip reports as graded in lab
manual or as written from notes taken during field
trips
30 pts. participation in labwork and analysis of a news
_____ article
250 *pts Subtotal

- NOTE: Laboratory must be passed in order to pass the course.
Grades for this course are as follows: 90% average or better on lecture plus lab work = A; 80% average or better = B; 70% average or better = C; 60% average or better = D; less than 60% = F.

TOPIC CHOICES FOR LAB PAPERS:

- a) pros and cons of Beach Nourishment.
- b) practical tips for incorporating the "3R's" into your lifestyle.
- c) Energy analysis of your home/apartment (how much energy are you using?).
- d) What choices do we really have to match population growth to available resources (how can we achieve a sustainable quality of life)?
- e) other topic with instructor's approval.

TEAM PRESENTATION TOPIC:

Each student must participate in an oral and visual group presentation, based on the lab exercise beginning on page 63, titled "Urban Land Use." There will be 4 teams, each expected to make a 40-45 minute presentation. Grade will be based on:

- 1) quality and quantity of individual research (turn in notes and references) (50%)
- 2) the level of project success demonstrated during the presentation as shown by a realistic, cohesive and interesting product (30%)
- 3) the amount of cooperative participation in the team effort (20%).

Punctual and regular attendance is vital to completing all the assigned work of this course. There will be no make-up labs, field trips or class lectures. The student is responsible for obtaining notes to missed material. Make-up exams will be given only for emergencies considered acceptable to the University and approved by the instructor. Only documented excuses (see excuses accepted in the University Bulletin) will be approved. Students are expected to abide by the Honor Code of Conduct and to sign that pledge on all assignments and exams, except where group effort is allowed.

If you have a physical, psychological and/or learning disability which might affect your performance in this class, please contact the Office of Disability Services, 126A in B&E (803)-641-3609, as soon as possible. The Disability Services office will determine appropriate accommodations based on medical documentation.

Tentative Schedule

June 1	Introduction & Fundamental Concepts	Chapters 1(K)
	LAB: What Should/Would you do? (A&C)	
4	Earth materials; Soils and Environment	2,3
5	Intro. To Natural Hazards; assign teams;	4
	LAB: Campus Soil Survey	
6	Rivers and Flooding	5
7	Rivers and Flooding cont'd.; Landslides	6
8	FIELD TRIP	
11	EXAM #1 (Ch. 1-5); work on team presentations	
12	FIELD TRIP	
13	Landslides cont'd; Earthquakes	7
14	Earthquakes continued; LAB: Geologic Hazards	
15	Volcanoes; Coastal Hazards	8,9
18	Coastal Hazards continued; Water	10
19	FIELD TRIP	
20	EXAM #2 (Ch. 6-10); work on team presentations	
21	Water Pollution; Air pollution; Energy	11,17
22	Energy cont'd; LAB: Cost of Energy	15
25	Mineral Resources; LAB: Locating Mineral Resources	14
26	FIELD TRIP	
27	EXAM #3 (Ch. 11,14,15,17) ; work on presentations	
28	Waste Disposal; LAB: Investigating Attitudes about Nuclear Power	12
29	Student Presentations	
July 2	Environmental Health; Global Change, Land Use; Review; LAB PAPERS DUE	13,16,18
3	11 am – 2 pm COMPREHENSIVE FINAL EXAM	