

AGLY 103: Environmental Earth Science
Tentative Syllabus, Spring 2002

4 credit hours

Instructor: Karin L. Willoughby, Office #207, Science Bldg.

Office Hours: Monday, Wednesday, 1:00 - 2:15 pm; Friday, 12 - 1pm and by appt.

Time: Lecture: 11:00 - 11:50 am, Monday, Wednesday & Friday, Room 327 Science.

Lab Sec.1: 8-10:40 am, Mon. Sec.2: 2:30-5:15 pm, Mon.

Lab Sec.3: 2:30-5:15 pm, Wed.

Text: Environmental Geology, Edward A. Keller (K)

Lab Manual: Environmental Issues, Astwood and Carpenter (A&C)

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 studied and used to study complex environmental problems. To be successful, you will need to acquire knowledge about how the earth works, increase your understanding of environmental issues, build 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 points:	450 pts (150 each) on three exams
+	100 pts (50 each) on two 2-3 page, typed double-spaced papers, pertinent to course topics
	150 pts. comprehensive final exam
	50 pts. class participation, including attending class regularly and on time and contributing to DISCUSSION on environmentally significant issues

	750 pts. Subtotal

Laboratory	-- 25% of class grade*
Maximum points:	120 pts. team presentation and references
+	120 pts. grade on best 12 of 13 lab and field trip reports as graded in lab manual or as written from notes taken during field trips;
	10 pts. participation in lab and presentation of 2 news articles from reputable news sources

	250 pts. Subtotal

- NOTE: Lab must be passed to pass course. Grades for this course: 90% average or better = A; 80% or better = B; 70% or better = C; 60% or better = D; less than 60% = F.

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 provided by the instructor. 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.

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, 126 BSED, (803) 641-3609, as soon as possible. The Disability office will determine appropriate accommodations based on medical documentation.

TOPIC CHOICES FOR LAB PAPERS: a) pros and cons of Beach Nourishment and other methods used to minimize beach erosion. 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.

Tentative Laboratory Schedule

January	14, 16	Introduction; What Should/Would You do?
	21	HOLIDAY for Monday labs
	23, 28	Population Issues
	30, Feb. 4	Campus Soil Survey
February	6, 11	Cost of Energy; optional extra credit lab: Investigating Attitudes - Nuclear Power
	13, 18	Geologic Hazards - Earthquakes
	20, 25	FIELD TRIP
	27, Mar. 4	Geologic Hazards - Volcanoes
March	6, 18	Geologic Hazards - Coastal Land Use
	11, 13	SPRING BREAK
	20, 25	FIELD TRIP
	27, Apr. 1	FIELD TRIP
April	3, 8	FIELD TRIP
	10, 15	TEAM PRESENTATIONS
	17, 22	FIELD TRIP
	24, 29	Locating Mineral Resources

TEAM PRESENTATION TOPIC: Each student must participate in an oral and visual group presentation, based on an assigned topic. Grade will be based on:

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

Tentative Lecture Schedule

January	11	Introduction to course	Chapter 1 (K)
	14	Fundamental Concepts	1
	16	Earth Materials	2
	18	Earth Materials cont'd	
	21	HOLIDAY	
	23	Soils and Environment	3
	25	Soils continued	
	28	Pick presentation teams; Intro to Hazards	4
	30	Natural Hazards continued; Rivers	5
February	1	Rivers and Flooding continued	
	4	Flooding continued; Landslides	6
	6	Landslides continued	
	8	EXAM #1 (Chapters 1 - 6)	
	11	Earthquakes	7
	13	Earthquakes continued	
	15	Earthquakes continued	
	18	Volcanoes	8
	20	Volcanoes continued	
	22	Coastal Hazards	9
	25	Coast continued	
	27	Water	10
March	1	Water continued	
	4	Water Pollution	11
	6	Water Pollution	
	8	Waste Disposal	12
	11 - 15	SPRING BREAK	
	18	Waste continued	
	20	Environmental Health	13
	22	EXAM #2 (Chapters 7 - 12)	
	25	Environmental Health cont'd	
	27	DISCUSSION	
	29	Mineral Resources	14
April	1	Resources continued	
	3	Energy	15
	5	Energy continued	
	8	Energy cont'd	
	10	Global Change	16
	12	HOLIDAY	
	15	Air Pollution	17
	17	Land Use	18
	19	EXAM #3 (Chapters 13 - 18)	
	22	NO LECTURE to accommodate long lab this week	
	24	DISCUSSION	
	26	DISCUSSION	
	29	Summary and review	
May	3	COMPREHENSIVE FINAL EXAM (11 am - 2 pm)	