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Office Hours: Mondays and Wednesdays 10 – 11 am; Fridays 11:15 – 11:45 am;  
Tuesdays and Thursdays 10 – 10:45 am and by appointment.

Time: Lecture 9-9:50 am, Monday, Wednesday and Friday.  
Laboratory 1 – 3:40 pm, Monday.

Text: *Introduction to Environmental Geology* (4<sup>th</sup> edition), Edward A. Keller (K)  
Lab Manual: *AGLY 103 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 used to study complex environmental problems. Emphasis is on acquiring knowledge about how the earth works, building individual ability to understand environmental issues, practicing decision-making skills for choosing among alternative environmental solutions and communicating that knowledge and understanding to others in oral and written form.

Grading: Lecture -- 75% of class grade; points assigned as follows:

300 points (150 pts each) on two exams  
150 pts; total on best 10 out of 12 quizzes  
100 pts; student presentation (the 3 R's)  
150 pts; comprehensive final exam  
50 pts; class participation, to include  
attending class regularly and on time  
and contributing pertinent comments  
on environmentally significant issues  
during the 2 "Discussion" days  
750 pts Subtotal

Laboratory -- 25% of class grade\*

70 points (35 pts. each) on two lab papers  
130 pts; total grade on best 13 out of 14 lab and field  
trip reports  
40 pts; class participation in lab plus a  
presentation of a news article  
from a newspaper or news magazine  
250 pts. Subtotal

NOTE: Laboratory must be passed in order to pass the course.

There will be no instructor assisted make-up labs, field trips or classes. The student is responsible for obtaining notes to missed material. However, the lowest weekly grade from lab manual or field trip will be dropped. Make-up exams will be given only for excused absences considered acceptable to the University and approved by the instructor. No make-ups will be given for lecture quizzes, since the 2 lowest grades will be dropped. Only documented excuses will be considered for approval. **Cell phones** are NOT ALLOWED to be turned on (even as a clock) during lecture. Students who are seen/heard using a cell phone may be asked to leave class. If a student needs to have a cell phone, pager or walkie-talkie on during class, he/she must receive permission from the Instructor first.

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, B&E, (803)641-3609, soon as possible. The Disability Services Office will determine appropriate accommodations based on medical documentation.

### Tentative Laboratory Schedule

January	14	What Should/Would You do?	(A&C)
	28	Population Issues	
February	4	FIELD TRIP	
	11	Geologic Hazards - Plotting and Locating Earthquakes	
	18	FIELD TRIP	
	25	Campus Soil Survey	
March	3	Locating Mineral Resources	
	10 - 14	SPRING BREAK	
	17	Cost of Energy	
	24	Investigating Attitudes about the Use of Nuclear Power and Weapons	
	31	Energy Use - Present and Future	
April	7	FIELD TRIP	
	14	FIELD TRIP	
	21	FIELD TRIP	
	28	Urban Land Use	

**TOPIC CHOICES FOR LAB PAPERS;** minimum of 3 .5 pages long (double-spaced, 12 point copy) with additional page for at least 3 references. You need to do **TWO** (2) of these choices for up to 35 points each -- **A)** Define, list and discuss the pros and cons of Beach Nourishment. **B)** Water Pollution – what are some examples; how big a problem is it and what can an individual do to make a difference? **C)** Do an Energy Analysis of your home or apartment (how much energy are you using and what are you willing to do to reduce energy use?) – get

handout to help with this topic. **D)** How can we achieve a sustainable quality of life? That is, what choices do we really have to match population growth to available resources? **E)** Indoor Air Pollution – what is it, how is it caused and what can be done to improve air quality in buildings? **F)** What is Global Climate Change? Should we be worried or do anything about it? And is there any evidence out there that says the current climate changes are normal – that is, not human caused? Wikipedia is not a dependable resource and may not be accurate. If you use it to get started, you must also use at least 3 other resources.

### Tentative Lecture Schedule

January	14	Introduction to course	Chapter 1 (Keller)
	16	Fundamental Concepts	1
	18	The Earth's Interior; QUIZ #1	2
	21	HOLIDAY	
	23	Plate tectonics	
	25	Plate tectonics cont'd; QUIZ#2	
	28	Plate tectonics cont'd	
	30	Rocks and Minerals; QUIZ #3	3
February	1	Rocks and Minerals cont'd	
	4	Ecology and Geology	4
	6	Ecology and Geology cont'd; QUIZ #4	
	8	Introduction to Natural Hazards	5
	11	Earthquakes	6
	13	Earthquakes cont'd; QUIZ#5	
	15	Earthquakes cont'd	
	18	Volcanoes; QUIZ #6	7
	20	Volcanoes cont'd	
	22	Rivers and Flooding	8
	25	Rivers cont'd; QUIZ #7	
	27	Slope Stability	9
	29	Coastal Processes	10
March	3	Coastal Processes cont'd	
	5	EXAM #1 (Chapters 1 – 8)	
	7	DISCUSSION	

10 - 14 SPRING BREAK

	17	Extraterrestrial objects	11
	19	Water Resources; QUIZ #8	12
	21	Water cont'd	
	24	Water Pollution	13
	26	Mineral Resources; QUIZ #9	14
	28	Mineral Resources cont'd	
April	31	Energy Resources	15
	2	Energy cont'd; QUIZ#10	
	4	Energy cont'd	
	7	Soils	16
	9	Waste Management; QUIZ#11	17
	11	Waste cont'd	
	14	Waste cont'd; QUIZ#12	
	16	Group Environmental Poster Presentations	
	18	Air Pollution	18
	21	EXAM #2 (Chapters 9 - 16)	
	23	Global Climate Change and the Future	19, 20
	25	DISCUSSION	
	28	Geology, Society and the Future cont'd; review	
May	7	FINAL EXAM (8 -11 am) with emphasis on chapters 16, 17, 18, 19, and 20.	

Topic Schedule for Quizzes – 15 points each (with 1 or 2 questions)

- Quiz #1 – Chapter 1; Fundamental Concepts
- #2 – Chapter 2 to 2.3 on p. 42; Layers of the Earth
- #3 – Chapter 2 p. 42 – 65; Plate Tectonics
- #4 – Chapter 3; the Rock Cycle
- #5 – Chapter 4; Ecology
- #6 – Chapter 5; Natural Hazards
- #7 – Chapter 6; Earthquakes
- #8 – Chapter 8; Flooding
- #9 – Chapter 10; Coastal Processes
- #10 – Chapter 13; Water Pollution
- #11 – Chapter 14; Mineral Resources
- #12 – Chapter 15; Energy Resources