

Geology 1010
Fall 2006, MWF 11-12 plus Lab
Karen Kortz

Goals of this course: To gain a basic understanding of fundamental concepts in geology
To predict the geology of an area based on the plate tectonic setting
To explain the Earth's effects on people and people's effects on the Earth
To communicate geologic ideas effectively using PowerPoint

Required text: The Changing Earth by Monroe and Wicander

Office hours: M 9-10, Tu 12-2; W 3-4; F 8-10 or by appointment
Room 1204 (1st floor faculty office area)
Office phone: 333-7443
Email: kkortz@ccri.edu

Course grade breakdown:

Three 1-hour exams	20% (lowest score dropped except 0%)
Final exam	15%
Homework (1)	5%
Final presentation	15%
Labs	35% (lowest score dropped except 0%)
Class participation	10%

Any student with a documented disability is welcome to request accommodations. Please see me as soon as possible. Please also contact Disability Services for Students at 333-7329.

Exams

There will be three in-class hour exams covering material from lectures, from your book, from the homework and from the labs. The material covered by the exams will focus on the lectures in class. This is a reason why class attendance to each class is very important! Exams will consist of short answer and multiple choice questions. The exams will focus on testing how well you understand the material, not how well you can memorize facts.

There will be NO MAKE-UP EXAMS. Please come talk to me if you missed an exam for extenuating circumstances. Your lowest exam score of the three exams will be dropped, unless it is a 0% because you did not take the exam. You need to average 55% on the two hour-exams that are counted and the final exam in order to pass the class – see below.

The final exam will be cumulative.

Homework

There will be 1 homework assignment due at the end of the semester. This assignment will ask you to reflect on the course and assignments you completed during the semester.

The homework is due at the beginning of the class period, so if you are late to class, your homework will also be considered late. The homework assignment will be accepted but marked off 20% if you turn it in on the day of the final.

Lab

Lab exercises are an important part of this geology class. You will be investigating concepts in more detail than what we covered in lecture. You will work in groups in the labs. But you must write down your own answers and not copy off of other members of the group. Therefore, do not write the exact same answers as other members of your group. If I determine that this has been done, I will give a zero.

Lab exercises will be due at the end of each lab. It is very important that you attend every lab and that you show up on time. You will lose points on your lab if you show up late. Lab cannot be made up unless you talk to me beforehand (and, even then, many labs cannot be made up). Any missing lab will count as 0%. I will drop your lowest lab score, unless it is a 0% because you didn't show up for lab.

Final Presentation

You will give a final presentation at the end of the semester. This presentation, given with PowerPoint, will involve a topic of your choice that relates geology to history, art, or culture. More information about the presentation will be given at a later date.

Class Participation

Studies have shown that listening to lecture is not the best way for most students to learn. Therefore, to break lecture up and to make the class more interactive, there will be many short assignments done during class time. This allows you to participate in your own learning. Involvement in class helps with your understanding of the material, therefore it is very important that you do so.

As a result, class attendance is very important! You can not participate if you are not there. You are allowed to miss only 3 class exercises without penalty. After three have been missed, 1 point of the 10 points assigned to class participation will be taken away for each assignment missed.

Grades and Extra Credit

My grading scale is a typical one as follows:	90-100%	A
	80-89%	B
	70-79%	C
	60-69%	D
	below 60%	F

PLEASE NOTE: You need a 55% average on the two highest exams and the final to pass the class. This means that if your average grade for the class is above 60% but you averaged only 50% on the exams, you will fail the class. So be sure to study for the exams!

There will be no separate extra credit assignments, so be sure to do the work for the class when it is assigned. However, I will give 1 EXTRA CREDIT POINT for each recent article related to geology (from a newspaper, magazine, journal, or online) brought to me. This extra credit will be added to your homework grade. Each student may receive a maximum of 10 extra credit points in this way. Great places online to look for articles are: Geotimes (<http://www.geotimes.org/current/>) and Live Science (<http://www.livescience.com/> especially Forces of Nature and Environment).

Class Schedule

Please note that the schedule is subject to change. If you miss a class, please be sure to find out whether any changes were made.

#	Date	Topic	Reading	Lab
1	Sept. 6	Introduction; Origin of the Earth	4-13, 22-23, 719-722	
2	Sept. 8	Earth-like planets	12-15	
3	Sept. 11	Interior of the Earth	203-204, 221-228	#1: Intro Minerals Read: 60-79
4	Sept. 13	Observing plate boundaries	16-19	
5	Sept. 15	Evidence for plate tectonics; Hotspots	28-42, 48-52	
6	Sept. 18	Plate tectonic boundaries	39-40, 42-48	#2 Minerals
7	Sept. 20	Rock cycle	19-20	
8	Sept. 22	TBA		
9	Sept. 25	Igneous Rocks	88-89, 95-100	#3 Igneous Rocks
10	Sept. 27	Magma	89-94	
11	Sept. 29	Igneous features; What come out of a volcano?	100-106, 116-121	
12	Oct. 2	Types of volcanoes	114-115, 121-128	#4 Sedimentary Rocks
13	Oct. 4	Evacuation of Mt. St. Helens	129-132	
14	Oct. 6	EXAM 1		
	Oct. 9	NO CLASS		No lab: PowerPoint workshops
15	Oct. 11*	Volcanism and plate tectonics	133-135	
16	Oct. 13	Sedimentary rocks; Geologic time	140-141, 153-159, 162	
17	Oct. 16	The Old Man of the Mountain	141-146	#5 Earthquakes
18	Oct. 18	Causes of Landslides	292-311	
19	Oct. 20	Portuguese Bend Landslide	311-317	
20	Oct. 23	NO CLASS (GSA meeting)		No lab
21	Oct. 25	Video: Anatomy of a Volcano		
22	Oct. 27	Earthquakes	198-203, 207-210	
23	Oct. 30	Earthquake damage	210-220	#6 Short Presentations
24	Nov. 1	Tsunami	211-213	
25	Nov. 3	EXAM 2		
26	Nov. 6	Streams	323-335, 345-346	#7 Metamorphic Rocks (M: Nov 6 Tu: Nov 14 W: Nov 15)
27	Nov. 8	Floods	322, 333-334	
28	Nov. 10	Flood control	337-340	
	Nov. 13	NO CLASS		#8 Groundwater
29	Nov. 15	Deformation of rocks	174-186, 188-189, 260-265, 270-274	
30	Nov. 17	Groundwater	354-356, 360-366	
31	Nov. 20	Groundwater contamination	370-375	#8 Groundwater
32	Nov. 22	Groundwater withdrawal	357-359, 367-369	
	Nov. 24	NO CLASS -- THANKSGIVING		

33	Nov. 27	Glaciers	386-394	#9 Geologic Maps
34	Nov. 29	Glacial features	394-397, 400-406	
35	Dec. 1	Glacier National Park	398-399	
36	Dec. 4	EXAM 3		#10 Cratering
37	Dec. 6	Climate Change and CO2	10-11	
38	Dec. 8	Shorelines	440-441, 447-458	
39	Dec. 11	Sea level rise	458-463	Final Presentation
40	Dec. 13	Climate change on other planets		
41	Dec. 15	The planets <i>HW due</i>	12-15, 40-41, 719-722	
		FINAL EXAM		

* Wednesday, October 11 follows Monday's schedule