GEOL 0800: GEOLOGY

SYLLABUS FOR SPRING 2012 (2124)

General Information:

Prerequisites: none

Class Times: T 7:00-9:30 pm

Lecture Location: Mt. Lebanon High School (room usually posted in high school lobby).

Website: Lecture and other materials will be available on CourseWeb: http://courseweb.pitt.edu

Instructors:

Dr. Charles E. Jones Telephone: 412-624-6347 Office: 503 SRCC

Office Hours: Drop by after class or call for appointment in Oakland or

before class.

Email: <u>cejones@pitt.edu</u> NOTE: I get so much e-mail that, while I read it all, I often do not get time to answer it all. Thus, if you need an answer, don't be shy about talking to me after class!

Recommended Text: Essentials of Geology by Stephen Marshak, any edition

Course Overview:

This course introduces our current understanding of the geologic processes that shape the Earth, drive its evolution, and impact our lives. Important processes include plate tectonics, volcanism, solar-driven variations in the oceans and atmosphere, and the activities of life itself. I hope an enhanced understanding of the Earth will make every outdoor experience more interesting and more beautiful.

Grading:

The course grade will be based on three midterm exams, a final, and homework. The midterms and final exam will focus on the lecture notes. The overall grading breakdown will be as follows:

First Exam:	Tuesday, Jan. 31	10 %
Second Exam:	Tuesday, Feb. 28	20 %
Third Exam:	Tuesday, Mar. 27	20 %
Final Exam:	Tuesday, Apr. 24	30 %
Homeworks:		20 %

It will *not* be possible to make up a missed exam unless you have a note from (1) a doctor or a dean, and (2) clearance from Dr. Jones. If you <u>anticipate</u> a schedule conflict, please see your me <u>ahead of time</u> to make arrangements. E-mail or call me *immediately* if some emergency (e.g., a car crash) keeps you away from an exam.

A = 90-100%, B = 80-90%, C = 70-80%, D = 60-70%, F = 0-60%. Plus and minus grades are assigned as follows (using B grades as an example): B = 80-83%, B = 83-87%, B + 87-90%.

Learning Disabilities or Non-Native Speakers:

If you need extra time or other accommodations during exams, contact Disability Resources and Service to find out what you need to do! Here is their web page: www.drs.pitt.edu. If you are not fluent in English and think it may slow you down on exams, please let Dr. Jones know in advance of the first exam!

Extra Credit:

The extra credit is intended to give people whose final course average may end up near a grade boundary (e.g., 89.5%) the opportunity to bump themselves up into the next grade category (e.g., 92.5%). It cannot lift

your final grade more than 3%! The extra credit opportunities are explained on the GEOL 0800 Courseweb documents page (at the bottom).

If you find yourself doing poorly in the class after the first exam, there is only one strategy to improve your grade: Study more effectively! You will have review guides to help focus your study for the exams, so if you are unclear about things, come see me! If you are surprised at a poor exam grade, please come see me! To encourage improvement throughout the course, I will bump your final class average up by 3% if each of your subsequent exam grades improves by at least 3%.

Cheating

Cheating will not be tolerated. The whole point of attending university classes is to develop learning, thinking, and other skills. This cannot be done if you simply copy from someone else. Cheating includes receiving any unauthorized assistance from any source during an exam or in preparation of a homework. You cannot copy from another person, refer to hidden notes of any type, or receive information via electronic or other means.

Class Outline

The next page features a tentative list of the lecture topics and homework exercises. **Be sure to mark on your calendar the exam dates so that you do not make travel plans that overlap with the exams!** The class has a heavier workload in the first half of the class to make your life easier when end-of-semester projects become due in your other classes.

Week #	Date	Lecture Topic	Homework (tentative)
1 10	10-Jan	1. Plate Tectonics	Basics of Maps
1	1 10-Jaii	2. Driving Forces of Plate Tectonics	and Units
2 17-J	17-Jan	Labor Day	-
	17-Jaii	3. Minerals	Plate tectonics
3 24-Ja	24 lan	4. Igneous Rocks	-
	24-Jaii	5. Igneous Processes	On-Line Minerals
4 31-Jan	21 1	1. Types of Volcanoes	
	31-Jan	EXAM 1: Jan. 31 (1st 5 lectures actually covered)	On-Line Ig Rocks
5 7-	7 5 1	2. Volcanic Hazards	-
	7-Feb	3. Sedimentary Rocks	On-Line Ig Rock Bodies
6 14-Feb	14 5-6	4. Sedimentary Facies	-
	14-Feb	5. Metamorphic Rocks	Sed Rocks HW
	04 5 1	6. Geologic Structures and the Formation of Mountains	-
7 21-Feb	1. Groundwater	On-Line Sed Rocks	
8 28-Fe	20 5 1	2. Geologic Time: Relative Ages	-
	28-Feb	EXAM 2: Feb. 28 Next 6 lectures actually covered)	On-Line Meta Rocks
9 6-Mar	C M=::	3. Geologic Time: Absolute Ages	-
	6-Mar	4. Fossil Fuel Resources	-
10 12	12 M	5. The Nuts and Bolts of Earthquakes	-
10	10 13-Mar	6. Earthquake Hazards	-
44 0	20 M	1. River Systems I: River Basics	-
11	20-Mar	2. River Systems II: Deltas and Floods	-
12 27-M	27.14	River Systems I: River Basics	-
	2/-Mar	EXAM 3: Mar. 27 (Next set of 6 lectures actually covered)	-
13 3-Apr		3. Beaches I	-
	3-Apr		-
14 1	10.1	4. Beaches II	On-Line Beaches?
	10-Apr	5. Climate Change I	-
45	17-Apr	6. Climate Change II	-
15		7. Glaciers	On-Line Glaciers?
Finals Week	24-Apr	Exam 4: Tuesday Apr. 24 at the regular time and place	The final exam is semi- comprehensive; see final study guide.