GLY 200PHYSICAL GEOLOGYText: Physical Geology11<sup>th</sup> ed., (2006) by Plummer, McGeary, and CarlsonInstructor: Dr. Ronald L. Martino, ProfessorOffice: \$174; Office Hours: M: 8-9, 3-5; T: 8-10; W: 8-9, 3-5Phone: 696-2715E-mail: martinor@marshall.edu

Course Description: Physical Geology, 3 credit hours,

3 lectures totaling 150 minutes/week

An elementary but comprehensive physical geology course that deals with the earth's origin, composition, tectonics and processes. Intended primarily for, but not limited to, the science major.

Co-requisite\*: GLY 210L Earth Materials Lab (\*depending on major)

## **Desired Learner Outcomes/Objectives**

The goals of this course are for each student to: 1) develop a basic understanding of how the earth works;

- 2) become familiar with the various types of internal and external geologic processes as well as the earth materials that they create and modify through time;
- develop an awareness of the impact of man's activities on certain geologic processes and the importance of understanding these interactions to our own wellbeing; this should enable students to make better-informed decisions regarding a number of scientific, technological, societal, and individual issues;

4) acquire an understanding of the interconnectedness of all sciences.

## Grading

The final average will be calculated as follows:

Drop low hour exam (Exam 1, 2, 3, or 4) Remaining hour exams = 60 % (20 % each) Final Exam = 30 %Attend/participation = 10 %

An entrance assessment exam will be given on the first day of class to each student; extra credit points (their score/10) will be added to first exam. An exit assessment exam will be given immediately following the final exam; points will be added or subtracted from final exam based on performance.

Points added to final will be determined by exit exam score-entrance exam score/4.

Final letter grades will be assigned on the basis of your final average as follows:

A (90-100), B (80-89), C (70-79), D (60-69), F (<60)

Since the lowest exam score can be dropped, there will be no makeup exams for any reason. If you miss an exam, it automatically becomes the one that you drop. If you miss any other exams, they will be counted as "0".

Any form of academic dishonesty that occurs will result in dismissal from the course prior to Oct 27, and a reduction in final letter grade by 2 letter grades after that time. In both cases, a letter outlining the offense will be forwarded to the academic dean for consideration of further action (see

**F-06** 

p. 105-109, 2005-2007 Undergraduate Catalog).

## **Attendance/Class Participation**

A daily record of attendance will be kept by taking roll during each class. If a student comes in late, it is their responsibility to notify the instructor at the end of class. You will be asked to be prepared to discuss several questions for each lecture. These assignments help students keep pace with readings and better understand material discussed in lecture.

The attendance/participation average will be determined as follows:

a) 50% will be based on attendance; excused absences will be allowed for serious illness, death

in the immediate family, military or legal obligations, or university activities that are excused by the academic deans. Lateness, or cutting class or portions of class will reduce the attendance/ participation grade. If you have a valid reason for missing class, please be sure the instructor is informed. Attendance grade will reflect number of cuts; no cuts=100%.

b) 50% will be based on your participation in class discussions. You can maximize this portion of your grade by keeping up with assigned readings and review questions, and actively and constructively contributing to class activities.

Course Outline		
Week	Topic	Reading Assignment
1	Introduction to Physical Geology	<b>C</b> . 1
2	Atoms, Elements, & Minerals	C. 2
3	Origin Igneous Rocks, Intrusive Activit	y C. 3
4EXAM # 1		
5	Volcanism & Extrusive Igneous Rocks	C. 4
6	Sediments & Sedimentary Rocks	С. б
7	Metamorphism & Metamorphic Rocks	C. 7
EXAM # 2		
8	Weathering & Soils	C. 5
9	Mass Wasting	C. 9
10	Groundwater	C. 11
10/27/06 - Last day to drop a full semester individual course		
	_EXAM # 3	
11	Geologic Structures	C. 15
12	Earthquakes	C. 16
13	Global Tectonics	C. 19
EXAM # 4		
14	Glaciers & Glaciation	C. 12
15	Geologic Resources (tentative)	C. 21
FINAL EXAM* (comprehensive), December 8, 8:00 AM		

## **Course Outline**

\* The final exam will be based 50 % on last block of material and 50 % comprehensive (i.e. on main ideas from earlier blocks).

Websites of interest: <u>www.usgs.gov</u> (U.S. Geological Survey)

www.agi.org. (American Geological Institute); www.geosociety.org (Geol. Society of Am.)

http://www.bls.gov/oco/ocos050.htm. (U.S. Dept of Labor); www.aapg.org (Am As. Petrol Geol)