HISTORICAL GEOLOGY

Instructor: Dr. Ronald L. Martino

Office: 174 Science Building, Office Hours: Mon, Wed, 8-9; Tue: 8-1

Phone: 304-696-2715; Fax: 304-696-3243

Email: martinor@marshall.edu

Text: The Earth Through Time, 2006, 8th Edition, H. L. Levin

Course Description 3 credit hours, three 50 minute lectures/week

Interpretation of chronologic history and development of the earth,

sequence of the geologic ages and rock formations, and

development of life based on fossil record.

Course Objectives

1) to provide an understanding of current geologic interpretations regarding the origin of the earth and its physical, chemical, and biologic development through time;

- 2) to develop a working knowledge of the principles, assumptions, types of evidence, and methodology used to develop historical interpretations from the rock record;
- 3) to provide an overview of the changing geography of the world through time, with emphasis on geologic events that have shaped the North American continent.

Grading:

The final average will be calculated as follows:

Exams 1, 2, 3, and 4 = 15 % each Final Exam = 20 % (comprehensive) Attendance = 10 % Participation = 10 %

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). Roll will be called at the beginning of each class. If you arrive late, it is your responsibility to notify the instructor that you are present at the end of the period. Unexcused absences will count against the attendance grade (-2.5). Lateness will also be penalized (-1 pt per occurrence). Participation grade is based on student's preparation for class and ability to respond to assigned questions and participate in class discussions.

Course Policies

Only legitimate excuses will be considered for missing an exam. These include verifiable medical, legal or military reasons, death in the immediate family, or participation in institutional activities (e.g. debating, musical performances, athletic

events) which are excused by an Academic Dean. Students should notify the instructor prior to the exam if they will not be present.

Any form of academic dishonesty that occurs will result in dismissal from the course up until March 16, and an automatic final grade of "F" after this date. In both cases, a letter outlining the offense will be forwarded to the academic dean for consideration of further action. (see p. 105-109, 2005-2007 Undergraduate Catalog).

Schedule of Topics

	•	Reading
Week 1	Topic	Assignment (Chapter)
1-2	Introduction to Earth History	1-3
3	The Sedimentary Archives	5
4	Life on Earth: What Do Fossils Reveal	6
	Exam # 1	
5	Earth Structure and Plate Tectonics	7
6	Earliest Earth:Archean Eon	8
7	The Proterozoic Eon	9
	Exam # 2	
8	Early Paleozoic Events	10
9	Late Paleozoic Events	11
10	Life of the Paleozoic (3/16/07 – Last day to drop individual course)	12
	Exam # 3	
11	Mesozoic Events	13
12	Life of the Mesozoic	14
	Exam # 4	
13	Cenozoic Events	15
14	Life of the Cenozoic	16
15	Human Origins (naturalistic perspective)	17
	Final Exam 5/4/07, 8:00 AM	

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)