**GLY 201 HISTORICAL GEOLOGY SP-18**

**Instructor**: Dr. Ronald L. Martino

Office: S174; Hours: M: 3-4, T: 11-12, 3-4, W: 1-4, Th: 11-12 (appt. recommended)

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**Text:** The Earth Through Time, 2013, 10th Edition, H. L. Levin

**Course Description** 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 (3 credit hours).

(GLY 211L Historical Geology Lab, 1 credit hour, is

recommended to be taken with GLY 201).

**Course Meeting/Location** MWF 9-9:50, S170

# Course Objectives/Methods of Assessment

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| **Course Objective** | **Student Activity** | **Assessment Tool** |
| To acquire an understanding of current geologic interpretations regarding the origin of the earth and its physical, chemical, and biologic development through time; | Reading, homework, lectures,  class discussion | Exams, Class Participation, Homework |
| To develop a working knowledge of the principles, assumptions, types of evidence, and methodology used to develop interpretations of earth history from the rock record; | Reading, homework, lectures,  class discussion; field trips  (hands-on lab experience , with GLY 211L) | Exams,  Class Participation, Homework  (Lab Exercises, Quizzes) |
| To obtain an overview of the types and rates of global geographic changes that are interpreted to have taken place, with emphasis on geologic events that have shaped the North American continent. | Lectures,  class discussion,  field trips | Exams,  Class Participation, Homework |
| To acquire an appreciation of the integrated use of a range of scientific disciplines in the study of earth history | Class interaction, readings,  field trips | Class Participation, Exams,  Homework |

**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).

The attendance grade will be based on the number of unexcused absences (cuts). No cuts=100%. 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. Lateness will be counted against the attendance grade.

The participation grade is based on student’s preparation for, and attentiveness during class. It is also determined by their ability to respond to assigned questions and participate in class discussions, and performance on any homework that may be assigned, or quizzes that are given. Since you must be present to participate, attendance will also impact your participation grade.

**Course Policies**

In general, only university-excused absences will be accepted for missing an exam or class (2017-18 Undergraduate Catalog). Other reasons that may be considered include hazardous travel conditions or other travel problems for commuters, serious illness or injury, or family emergencies. Students should contact me in advance of missing class for confirmation that absence will be excused.

Any form of academic dishonesty that occurs will result in dismissal from the course and an automatic final grade of “F” A letter outlining the offense will be forwarded to the academic dean for consideration of further action (see <http://www.marshall.edu/catalog/files/UG_17-18_published_09-15-17.pdf>.

**Official University Policies**

All students must follow University policies as specified at [www.marshall.edu/academicaffairs/policies/](http://www.marshall.edu/academicaffairs/policies/).

**Schedule of Topics**

Reading

Week Topic Assignment (Chapter)

1-2 Introduction to Earth History 1-3

3 Rocks & Minerals: Records of Earth History 4

4 Earth Structure and Plate Tectonics 7

**Exam # 1**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5 The Sedimentary Archives 5

6 Life on Earth: What Do Fossils Reveal 6

7-8 “PreCambrian” History (Archean + Proterozoic) 8-9

\_\_\_\_\_\_\_\_\_**Exam # 2\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

9 Early Paleozoic Events 10

10 Late Paleozoic Events 11

11 Life of the Paleozoic 12

**\_\_\_\_\_\_\_\_ Exam # 3\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12 Mesozoic Events 13

13 Life of the Mesozoic 14

\_\_\_\_\_\_\_\_\_**Exam # 4**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14 Cenozoic Events 15

15 Life of the Cenozoic 16

\_\_\_\_\_\_\_\_\_**Final Exam Friday, May 4, 8:00 am (comprehensive) \_\_\_\_\_\_\_\_**

**Websites of interest:** [www.usgs.gov](http://www.usgs.gov) (U.S. Geological Survey)

[www.agi.org](http://www.agi.org). (American Geological Institute); [www.geosociety.org](http://www.geosociety.org) (Geol. Society of Am.);

<http://www.bls.gov/oco/>. . (U.S. Dept of Labor); [www.aapg.org](http://www.aapg.org) (Am As. Petrol Geol)