GEOL 102 Historical Geology

Instructor: Dr. Louis Zachos, 118G Carrier Hall, 915-8827, <u>lgzachos@olemiss.edu</u>

Textbook: Harold Levin, *The Earth Through Time*, Wiley, ISBN 9780470387740

Catalog Description: Classical introduction to Earth science and the historical development of the Earth and its life. Satisfies science requirement of core curriculum when taken in conjunction with Geol 112.

Course Description: General principles of historical geology with emphasis on changes in the Earth and life through time. Topics include an overview of the rock cycle and plate tectonic theory, with emphasis on stratigraphic principles and the fossil record. The great British geologist Charles Lyell emphasized that "The present is the key to the past." This course will consider how the past is the key to the present.

Course Objectives: Students successfully completing this course will be able to ...

- 1. Understand the basic episodes in geologic time that define the history of the Earth.
- 2. Recognize scientific and quantitative methods and approaches to describing the geologic history of the Earth.
- 3. Describe the history of life on the planet, recognize the major categories of organisms, and understand the basic theories of genetics, development, and evolution and how they are interrelated.
- 4. Demonstrate how knowledge of the history of the Earth is important to understanding many of the major issues and problems facing the modern world, including those that touch upon the environment, climate change, and public policies.

Labs

The accompanying laboratory course is GEOL 112. This 1 credit hour laboratory course is not required unless you need a lab science to fulfill the general education requirements set forth by the university. The lab instructors will hand out a separate laboratory syllabus.

Grading:

Quizzes (10%)
In-Class Exercises (10%)
Exam 1 (20%)
Exam 2 (20%)
Exam 3 (20%)
Final Exam (20%)