

## **GEOLOGY 172: THE EARTH THROUGH TIME LABORATORY**

Syllabus and Tentative Schedule Fall 2009

Instructor: Dr. Richard A. Laws

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Laboratory Teaching Assistant: Ms. Emily Gould, esg3851@uncw.edu

Teaching assistant office hours: M 11:00-1:00

Faculty office hours: see lecture syllabus

### Course Overview:

This laboratory will provide hands-on experience illustrating, applying, and practicing the concepts discussed in lecture in GLY 172. We will consider the basic principles that geologists use to interpret Earth history, specific examples of the application of these principles, and we will learn about the regional historical geology of North America.

LABORATORY MANUAL: Gastaldo, Savrda, and Lewis, 2006. Deciphering Earth History. Contemporary Publishing.

### COURSE REQUIREMENTS AND GRADING POLICY:

Regular attendance at laboratory sessions is mandatory. Please read the assignments in the laboratory manual **prior** to coming to lab. Each lab session will begin with a 10 minute quiz based on the assigned readings from the lab manual for that week's lab (shown in the schedule below). Make sure you read the materials **before** coming to lab. Bring the lab manual with to every lab session. Also, you will need to remove pages from the lab manual to turn in each week as part of the exercise.

Grading of laboratory portion of course (lab grade represents 25% of total grade):

Pre-lab quizzes: 10% of lab grade

Laboratory exercises: 60% of lab grade (I will drop the lowest exercise grade)

Field trip: 10% of lab grade

Lab final: 20% of lab grade

**Makeup policy:** Except under extreme circumstances, I will allow no more than one missed lab to be made up. If a lab is missed, it must be made up within 2 weeks. Labs are due at the beginning of the next lab period.

Note: The UNCW Academic Honesty Policy will be adhered to in this course (see UNCW Student Handbook and Code of Student Life).

LABORATORY SCHEDULE:

- Aug. 24 Exercises 1 and 2: Sedimentary rocks and Depositional Environments  
31 Exercise 3: Relative Time
- Sept. 07 **LABOR DAY**  
14 Exercises 4 and 5: Lithostratigraphy and Biostratigraphy  
21 Exercises 6 and 7: Radiometric dating and Geophysical Stratigraphy  
28 Exercise 8: Fossil Preservation and Taphonomy
- Oct. 05 **FALL BREAK**  
12 Exercise 9: Evolution  
19 Exercise 10: Early Paleozoic Life  
26 Exercise 11: Later Paleozoic Life
- Nov. 02 Exercise 12: Post Paleozoic Life  
09 Exercise 13: Paleoecology  
16 Exercise 14: Paleoclimatology  
23 Exercise 15: Regional Geology of North America I  
30 Exercise 15: Regional Geology of North America II
- Dec. 07 LAB FINAL

Field trip date: Friday, Oct. 23