

**PHYSICAL GEOLOGY LAB SYLLABUS**  
**GLY 1010L**  
**Physical Geology Lab**  
**Fall – 2011**

**Instructor's Name:** Marianne Caldwell

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**Office Hours (Day, Time, Location):**

Mondays at Dale Mabry Campus in DSCS 128, 8- 9:30am and 12:15pm-12:45pm

Tuesdays online 8am-11am

Wednesdays at Dale Mabry Campus, DSCS 128; 8am-11am

Thursdays online 8am-10am

Also available by appointment

**Class Schedule:** Wednesdays 12:30pm

**Course Description:**

GLY 1010L is the laboratory class to accompany GLY 1010 (Physical Geology).

**Course Objectives:**

1. Demonstrate the use of scientific measurements and the metric system of units
2. Diagram the Geologic Time Scale and reproduce its chronological sequence with approximate dates for the Eras, Periods, and Epochs.
3. Identify and describe the readily observable properties of minerals and use these properties to identify common minerals with the aid of a flowchart.
4. Identify by Name, common igneous, sedimentary, and metamorphic rocks and their properties using readily observable characteristics.
5. Use a USGS Topographic map to determine elevations, distances, and positional information (using the Government Land Survey System also known as Township and Range) of specified locations.
6. Produce topographic maps and profiles by drawing the contour lines on sheets containing elevation data only.
7. Identify, on a map of the world showing the outlines of the plates, the name of each of the Earth's major tectonic plates and their direction of movement. Identify the types of plate boundaries, and describe the types of diastrophic activity associated with each type of boundary.

8. Interpret and identify the major types of geologic structures (including faults) by completing the subsurface portions of block diagrams given only the outcrop patterns.
9. Identify and describe erosional and depositional fluvial landforms on a map or photographic image.
10. Identify and describe glacial and Aeolian landforms on a map or photographic image.
11. Describe and diagram Florida's stratigraphy and lithology. Relate this explanation to Florida's Karst topography and hydrology.
12. Explain the major types of coastal landforms found along Florida's coast, and discuss how eustatic changes in the Pleistocene (and at present) have altered the coastline.
13. List and describe the interactions between humans and the physical environment that threaten to have deleterious consequences, including, but not limited to: shoreline modification, groundwater withdrawal and contamination, surface water diversion and pollution, and mining.

**Required Text Book:**

Geology Laboratory Manual by M. Caldwell; available at Dale Mabry Bookstore  
 Make sure you do not purchase the Online Laboratory Manual.

If you do not use the correct form or information sheet to answer the lab, 10 points will be deducted.

**Grading System:**

Final grades will be computed as follows:

60%	Lab Reports
20%	Lab Test I
20%	Lab Test II

The grading scale is as follows:

A	100-90%
B	89-80%
C	79-70%
D	69-60%
F	less than 60%

**Academic Dishonesty Policy:**

Students enrolled in online courses are expected to exhibit academic honesty. Copying or sharing of work is not allowed. Use of outside resources during tests is not permitted. All writing assignments must be written in your own words.

**Attendance Policy:**

Because of the nature of a lab course, students should attend all class meetings. Lab reports are due at the end of each lab period. There will be no make-up labs and each student is expected to attend all class meetings. Your lowest grade on a lab exercise will be dropped so if you miss a lab, this will be the lab grade dropped. You should arrive within 10 minutes of the class starting time to participate in lab that day. Arrival after that time will result in a deduction of 10 points per every 10-minute interval. Some of the labs may be completed independently. If you chose that option, you must either turn in the lab by 12:30pm on the lab due date or upload it to the online classroom website by 11pm the evening of the due date.

**Instructional Methods:**

In addition to the lab reports two tests will be given during the semester. Each test is “practical” in nature, meaning that the skills utilized in lab will be applied during the test. The format of the test is short answer and fill-in-the-blank.

**Online Classroom:**

A classroom website is available for student. The classroom gradebook will be kept on the website so that students can access grades at any time. You may also use the classroom email for communications and upload assignments. Students are asked to login within the first two weeks. Follow the directions for login from the HCC website at: <http://www.hccfl.edu> You must know your student ID number; if you have problems, please contact HCC Live on the HCC home page.

**Request for Accommodations:**

If, to participate in this course, you require an accommodation due to a physical or learning impairment, you must contact the Office of Services to Students with Disabilities. The office is located in the Student Services Building, Room 208. You may also reach the office by telephone at (813) 253-7031 {voice line}; (813) 253-7035 {TTD}.

**Assignments:**

Prior to class, students are expected to have read the lab exercise for the day. Students may work in groups for each lab exercise but not for the test. A calculator and pencil should be brought to each lab class. Students are required to complete lab exercises in pencil.

**Tentative Class Schedule**

<b>Date</b>	<b>Assignment</b>
8/24	Lab Introduction
8/31	Outdoor Classroom
9/7	Minerals

9/14	Igneous/Metamorphic Rocks
9/21	Sedimentary Rocks
9/28	Virtual Earthquakes (certificate only) * Meet in DSCS 215/217 Computer Lab
10/5	Topographic Maps
10/12	Lab Test I
10/19	Google Earth Lab Meet in DSCS 215/217 Computer Lab
10/26	Geologic Maps
11/2	Field Trip to Upper Tampa Bay Park (tentative)
11/9	Surface Water
11/16	Hurricane Tracking* (map and answers must be turned in; cannot be submitted via website)
11/23	Lab Test II
11/30	Optional Lab: Virtual River Discharge Meet in DSCS 215/217 Computer Lab

Lab exercises marked with \* have all the directions and information in the lab book and may be completed independently.