



## **PHYSICAL GEOLOGY ONLINE SYLLABUS**

**GLY 1010**

**Physical Geology Online**

**Spring 2010**

**Instructor's Name:** Marianne O'Neal Caldwell

**Telephone Number:** (813) 253-7251

**Email Address:** Use my online@hcc (formerly WebCT) email address.  
Alternative email address: mcaldwell@hawkmail.hccfl.edu

### **Communications Policy:**

I prefer that you email me within your online@hcc (WebCT) course. I will respond to all emails within two business days unless otherwise notified.

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

Mondays at Dale Mabry Campus in DSCS 128, 7:45-8am; 9:15am-11am; 12:15pm-1pm  
Tuesdays online 7:30am-10am  
Wednesdays at Dale Mabry Campus, DSCS 128; 7:30am-8am; 9:15am-11am  
Thursdays online 10am-12:30pm  
Also available by appointment

**Class Schedule:** Online

### **Course Description:**

This course covers basic geology and concepts and principles. Topics include origin and structure of the earth, processes involved in shaping the earth's crust, the nature and classification of earth materials, and the dynamic interactions of the lithosphere with the hydrosphere and the atmosphere that produce characteristic landforms.

Co-requisite: GLY 1010L

### **Course Objectives:**

1. Describe the scientific method and discriminate between scientific and nonscientific information.
2. State the age of the Earth as determined by scientific means and divide geologic time into the established Eras, Periods, and Epochs of the Geologic Time Scale.
3. Describe the structure of an atom and discuss how atoms bond, relating this to the structure and properties of minerals.
4. Define what a mineral is and describe the relationship of minerals to rocks.
5. Describe the Rock Cycle, listing and relating its products and processes.

6. Describe how igneous rocks may be characterized by their texture, composition, and provenance
7. Describe the origin of magma and the nature of intrusive and extrusive igneous processes and landforms.
8. Describe the Earth's differentiated structure and list the names and properties of the Earth's internal layers.
9. Describe and discuss the basic tenants of the theory of Plate Tectonics, including the origin of the theory, the types of plates, and the nature and consequences of their interactions.
10. Relate the theory of Plate Tectonics to the locations and occurrence of geologic hazards including earthquakes, tsunamis, and volcanic activity.
11. Describe the Hydrologic Cycle, both in general terms, and how it specifically relates to geologic processes.
12. Describe the formation, properties and classification of sedimentary rocks.
13. Describe the processes involved in metamorphism and discuss the textural and mineralogical changes that occur in metamorphic rocks.
14. List and describe the major types of crustal deformation and associated geologic structures.
15. Define and describe the processes of weathering, erosion, and mass movement (mass wasting).
16. Describe fluvial processes and landforms.
17. Describe the processes effecting shorelines and the resultant shoreline features.
18. Describe the distribution and movement of water in the earth's crust, relating this to Karst topography and other hydrogeological features such as springs, hot springs and geysers.
19. Describe the origin and nature of glacial landforms and the circumstances that have been hypothesized to explain the Pleistocene glaciations. Describe the role of wind as a geomorphic agent, listing the major types of aeolian erosional and depositional features, and the location of their occurrence.

**Required Text Book:**

Understanding Earth, 5th edition, by Goetzinger, Jordan, Press, and Siever

**Grading System:**

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

**Assignments:**

Assignment	Date to be Completed	Chapters Covered
Test I Review	1/29	
Discussion Board I	2/1	

Test I	2/6	1,2,3,4
Virtual Field Trip I	2/15	
Test II Review	2/19	
Discussion Board II	2/22	
Test II	2/27	5,6,7,8,12
Test III Review	3/12	
Discussion Board III	3/15	
Test III	3//20	13,14,16,17
Mid-term Break	3/27-4/3	
Virtual Field Trip II	4/12	
Test IV Review	4/16	
Discussion Board IV	4/19	
Test IV	4/24	18,20,21,23
Final Exam	5/1	Cumulative

Any late assignments will be reduced in grade by 10 points per week. Any test taken late will result in a deduction of 25 points per week.

**Course Grading:**

Total of 1,000 points:

Four Tests (150 points each) 600 points

Discussion Boards (25 points each) 200 points

Field Trip Reports (100 points each) 200 points

Optional Final Exam (150 points) which maybe be used to replace lowest test grade

Any extra credit points earned will be added to the 1000 point total.

Please allow one week for grading to be completed.

**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:**

Students are required to log in a minimum three times a week to complete assignments, participate in discussions, and check email. Students are required to respond to the discussion board no later than five days after the instructor's posting. Because of the nature of the online course, students are expected to keep up with the readings, participate in the online discussions, and take the tests by the designated completion date. Any late work will be assessed a penalty. Students are required to read all announcements posted by the instructor.

**Instructional Methods:****Tests**

Four Tests will be given, weighted at 15% each. An optional cumulative final exam may be used to replace your lowest test score. The tests and final exam will be a combination of multiple choice, short answer, and fill-in-the-blank questions. All tests and exams will be administered online. Please make sure you have a reliable internet connection prior to beginning the tests. If you do not have a reliable connection, please plan to take the tests at one of the HCC campuses. Preparation for the tests and final exam should include the following:

- 1) Reading and studying the textbook
- 2) Viewing Powerpoint presentations for each chapter
- 3) Complete online learning activities for each chapter including flashcards and quizzes.
- 4) Complete questions in instructor-written study guide for applicable chapters.

**Discussion Boards:**

Participation in an online discussion board of geologic topics is required. Students are asked to post a response to both the instructor's postings and postings made by other students (a minimum of two postings). If you do not post at least the minimum (two posts), points will be deducted. Responses should be well researched and grammatically correct as this will satisfy the Gordon Rule Requirement. If your writing has spelling or grammar errors, points will be deducted. Students are required to respond to the discussion board no later than five days after the instructor's posting. If you do not respond within the first five days, points will be deducted. Any late posting will be subject to the point penalty. One week after the due date, the discussion board questions will close. No postings will be accepted after that date and the student will receive a zero.

**Virtual Field Trips:**

Two virtual field trips are assigned which may be viewed in the virtual classroom. These will open when we cover the corresponding chapters to the topic. Students are required to complete questions relating to the field trips. The links to the narrated field trips and questions can be found at: "Chapter Resources".

**Late submissions:** Any late assignment will result in a penalty of ten points, increasing by ten points each week. For example, if you are one day late with a discussion board, the highest grade you can receive is 15 out of 25.

**Gordon Rule:**

The Gordon Rule requirement for this course will be fulfilled by the discussion board questions. For the discussion boards, students will be given essay-type questions and asked to respond. The answers should be in paragraph form with correct sentence structure and grammar. Each student should write in his or her own writing style. Plagiarism of the works of others should not be done.

The Gordon Rule Requirement for this class will also be fulfilled by summaries of the review questions for the class. There will be four sets of review questions (one for each test). The summaries will be due one week before each of the tests. The answers should be written in the student's own writing style and should answer at least twenty review questions. The reports should be typed and contain correct grammar and sentence structure. If the reports are turned by the respective due dates, up to 3 additional points may be added to each test as extra credit (maximum of 12 points out of 1000). Those papers with incorrect grammar and not containing sentences will not be awarded extra credit. Note that only the typed summaries turned in on time will be counted for extra credit. Late reports are not eligible for extra credit. Even if you choose to not earn extra credit at least one set of review questions must be submitted prior to the final class in order to fulfill the Gordon Rule requirement.

**Extra Credit:**

In addition to the review question for the Gordon Rule, students may earn extra credit points by completing the Online Review Quizzes. Any points earned will be added to the 1000 point total. These will be open throughout the time we are covering that set of material but will close the evening before each of the exams open. Therefore the review quizzes will close on Thursday evening before each of the tests and will not re-open. Please make note of the date each closes and plan your work accordingly.

**Help with online@hcc (WebCT) or technical issues:**

If you require assistance with the use of online@hcc, please go to the home page of the online@hcc website and information about how to get help is available. The link is on the same page and right below where you login.

**Privacy Statement:**

Students using online formats for study at HCC do so in a respectful, protected environment. However, this learning environment may at times be viewed by faculty (both current and those learning to become online facilitators), Distance Learning staff, and other experts, who are working with us to maintain the highest quality online courses. Please understand that this is not a secure, private environment.

**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}