

HILLSBOROUGH

Community College 

PHYSICAL GEOLOGY HYBRID SYLLABUS

GLY 1010

Physical Geology

Fall - 2011

Instructor's Name: Marianne O'Neal Caldwell

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Email Address: Please use the email in our online classroom. Alternative email address: mcaldwell@hawkmail.hccfl.edu

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: Mondays 9:30am-10:45am

Course Description:

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 Books:

Understanding Earth, 6th edition, by Grotzinger and Jordan
Notes and Study Guide, by M. Caldwell

Online Classroom:

A classroom website is available for student use. 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 week. 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.

Grading System:

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

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 expected to attend each class meeting and attendance will be recorded. Please arrive prior to the start time of each class. During the class students are asked to refrain from using cell phones for calls or text messages.

Instructional Methods:

The grades of the course will be based on four test grades weighted at 15% each. Four tests will be given along with an optional cumulative final test. The grade on the cumulative exam may be used to replace your lowest test grade. There are no makeup tests given so if you miss a test, you must take the final to replace the grade. The tests will be composed of multiple choice, fill-in-the-blank, short answer, or some combination of these question types. You will need a scantron for each test.

A Powerpoint Presentation on a geological feature. The Powerpoint presentation consisting of 10-15 slides describing the geology of a specific geologic feature will make up 15% of the class grade. Detailed instructions and a grading rubric can be found in the document entitled "Instructions for Powerpoint Presentation".

Additionally 15% of the grade will be based on worksheets/writing assignments throughout the term. These assignments will be weighted at one point each. Some may be completed during class time (9:30-10:45am) but others must be completed through the online classroom. No late assignments will be accepted. If you miss a class time in which a worksheet/assignment was given, you receive a zero for that assignment unless it is posted prior to 11:30pm that day. Throughout the term sixteen worksheets will be assigned. If you complete all sixteen, one will count as extra credit. No work will be accepted via email. All work must be correctly uploaded to the classroom website. The remaining 8% of the grade will be based on discussion board questions.

Grading for the class will be calculated as follows:

Test I	15%
Test II	15%
Test III	15%
Test IV	15%
In-Class Exercises	15%
Presentations	17%
Four Discussion Board Questions	8%

The optional final exam may replace the lowest lecture test. It will be weighted at 15%. Any extra credit points will be added to your lowest test grade.

Gordon Rule Assignments:

The Gordon Rule Requirement for this class will be partially fulfilled by the online Discussion Boards and the worksheets. Students will be required to respond to the four discussion board questions. The questions will be graded on both geological content and writing style. Additionally writing assignments will be required on some of the worksheets.

Extra Credit:

- 1) Review quizzes are available for each of the chapters on the classroom website. Although participation in these quizzes is optional, extra credit is available for correctly completing the answers on the quizzes.

- 2) There will be four sets of review questions (one for each test) available for extra credit due one week before each of the tests. If the answers are turned by the respective due dates, up to 3 additional points may be added to each test as extra credit. Late reports are not eligible for extra credit. Answers to sixty questions are required for extra credit. The questions must be correctly uploaded to the website to count for credit. No work will be accepted via email.

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}

Tentative Class Schedule:

Aug.	22	Introduction (Classroom & DSCS 215/217 Computer Lab)
	29	Worksheets 1 & 2 in-class (Computer Lab)
Sept	5	Holiday
	12	Worksheets 3 & 4 in-class; Test I Review Questions (Computer Lab)
	14	Discussion Board I Due (ONLINE)
	19	TEST I; Chapters 1, 2, 3, 4 (Classroom)
	26	Worksheets 5 & 6 in-class (Computer Lab)
Oct	3	Worksheets 7 & 8 in-class; Test II Review Questions (Computer Lab)
	5	Discussion Board II Due (ONLINE)
	10	TEST II; Chapters 5, 6, 7, 8, 12 (Classroom)
	17	Worksheets 9 & 10 in-class (Computer Lab)
	24	Worksheets 11 & 12 in-class; Test III Review Questions (Computer Lab)
	26	Discussion Board III Due (ONLINE)
	31	TEST III; Chapters 13, 14, 16, 17 (Classroom)
Nov	7	Worksheets 13 & 14 in-class; Test IV Review Questions (Computer Lab)
	9	Worksheets 15 & 16 and Discussion Board IV Due (ONLINE)
	14	TEST IV: Chapters 18, 20, 21, 23 (Classroom)
	21	Student Powerpoint Presentations (Classroom)
	28	Student Powerpoint Presentations (Classroom)
Dec	5	Optional Cumulative Final Exam 9:30am (Classroom)

Frequently Asked Questions:

1) *I lost my syllabus. How do I get another copy?* Go to the online classroom and click on "course content". You will find one posted there.

2) *Where do I find the questions for the Test Reviews?* They are posted in the online classroom and in the back of the study guide purchased from the bookstore.

3) *There are extra chapters in the Study Guide that we are not covering. Why?* Different terms, different chapters may be covered. You can merely skip those chapters not on the syllabus in the study guide.

4) *I was sick and missed one of the tests. What should I do?* You must take the Final Exam to replace a missed test. You do not need to bring any documentation of illness.

5) *My computer does not have Microsoft Word or Powerpoint. How do I submit my answers to the review questions? How do I complete the Powerpoint Presentation?* Please use a computer available on campus for typing your Gordon Rule Review questions and the Powerpoint presentation.

6) *Where are the speaker notes for the Powerpoint Presentation?* When you open a blank Powerpoint Presentation, there will be a box at the bottom to “click to add notes”. That is where you type the speaker notes. There should be very little text on the slides.

7) *Why can each topic for the Powerpoint Presentation only be done by one person?* In order to learn about as many different facets of Geology as possible, as many topics as possible should be covered.

8) *I missed a class and therefore missed turning in one of the in-class worksheets/activities. Is there any way to make that up?* Unfortunately you cannot make up a missed worksheet. You may complete the worksheets online by 11pm of the due date if you will be absent. If you do miss one, there is one extra worksheet assigned so your maximum possible score is 16/15. So if you miss one assignment and do all others, the grade would be 15/15.

9) *How do I calculate my final grade?*

The grades are weighted as follows:

Test I	15%
Test II	15%
Test III	15%
Test IV	15%
In-Class Exercises	15%
Presentations	17%
Four Discussion Board Questions	8%

To calculate your average:

- 1) Add up total points of the tests and add any extra credit awarded (Test Review Questions and Review Quizzes), multiply by 0.60.
- 2) Multiply Powerpoint Presentation grade by 0.17.
- 3) Total number of points from in-class worksheets
- 4) Average your grade on discussion boards and multiply by .08
- 5) Add together numbers from 1, 2, 3, and 4 above. The number you get is out of 100.

10) *Why should I study Geology?* We will answer this throughout the class. Geology studies the forces of earth and their effects on humans.