PELLISSIPPI STATE COMMUNITY COLLEGE  
MASTER SYLLABUS  

HISTORICAL GEOLOGY  
GEOL 1050

Class Hours: 3.0  
Credit Hours: 4.0  
Laboratory Hours: 3.0  
Date Revised: Fall 2012

Catalog Course Description:

A study of the interrelated physical and biological changes occurring during Earth’s 4.5 billion-year history. Geologic, biologic, and radiometric dating principles are used to interpret the rock and fossil records of change occurring on continents and in ocean basins that have affected the evolution of life on Earth. Course includes three hours of lecture and three hours of laboratory applications each week.

Entry Level Standards:

Students must be able to read and write at the college level and must have two years of high school algebra or one year of high school algebra and one year of high school geometry. Students must be able to give short oral presentations in front of the class.

Prerequisite:

GEOL 1040

Textbook(s) and Other Course Materials:


I. Week/Unit/Topic Basis:

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<th>Week</th>
<th>Topic</th>
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| 1    | Introduction to historical geology and geologic time  
|      | Rock forming Minerals and Rocks |
| 2    | Rock forming minerals and rocks  
|      | Weathering and sediments |
| 3    | Diversity of Life  
|      | Sedimentary rocks |
| 4    | Environments and Life; Sedimentary structures |
| 5    | Sedimentary Environments; Depositional sedimentary environments |
| 6    | Correlation and Dating Rocks; Stratigraphy and lithologic correlation |
II. Course Goals*:

The course will:

A. Develop an understanding of the nature of science and the scientific method. I.5, III.1

B. Develop an understanding that Earth is a dynamic planet and its history and features are consequences of natural processes that have operated throughout Earth’s history. I.5, III.2

C. Develop an understanding of geologic time and the methods used to interpret earth history. I.5

D. Develop knowledge of the features of the Earth and the processes by which they form. I.5

E. Develop an understanding of evolutionary theory. I.5

F. Develop knowledge of geology sufficient to understand earth science related events and issues presented in newspaper, magazine, radio, or television reports. I.5, VII.1

G. Understand the use of simple techniques and equipment to identify common rocks, minerals and fossils. I.5

H. Cooperate with student colleagues to research, analyze, and report on a geologically related topic. I.3, III.2, VI.1, III.3

I. Develop an understanding of careers in geology. II.1, II.2

*Roman numerals after course objectives reference TBRs general education goals.

III. Expected Student Learning Outcomes*:
The student will be able to:

1. Discuss the roles of observation and reasoning in applications of the scientific method. A

2. Discuss the concepts of relative and absolute geologic time, and the methods of determining the geologic of geologic events and materials. C

3. Identify common earth materials using simple tests, and provide an explanation of the major processes that operated to create the materials in a laboratory setting. G, B

4. Identify common fossil materials and provide an explanation for the method of preservation. B, E, F, G

5. Discuss earth science related issues and events presented in news media reports. E, F, D, C, B

6. Identify dynamic earth processes (e.g., erosion, flooding, sinkholes, earthquakes, volcanism). B, D, G

7. Discuss the manner in which dynamic earth processes effect personal safety, health, and financial security. B, D, G

8. Discuss the possible careers in earth science. I

* Capital letters after Expected Student Learning Outcomes reference the course goals listed above.

IV. Evaluation:

A. Testing Procedures:

Lecture material will be evaluated using twelve quizzes and two exams. Quizzes count for 24% of the total grade (2% each). Two of the lowest quiz scores will be dropped. The midterm exam is 25% of the total grade and the final is 30% of the total grade, for a total of 55%. The final exam must be passed in order to pass the course. Tests are short answer, multiple choice, fill in the blank and T/F although not all of these inquiry styles will be on every quiz or exam. The comprehensive final exam is multiple choice. **Quizzes and exams cannot be made up.** A participation grade is 16% of the total grade and is based on class participation, class discussions, being prepared for class, the homework and the student project. Attendance counts for 5% of the grade. Attendance is mandatory and **classes and associated activities cannot be made up.**

It is important to read your book and practice the self tests at the end of each chapter. Although all the quiz and exam questions will not come from these questions, your ability to answer them will help you gauge your understanding of the book chapters.

B. Laboratory Expectations:

In this class, lab work is intertwined with lecture material, so is not assigned a separate grade. There will be assignments that are not graded, that should be completed. These assignments are not “busy work”, but are intended to support the concepts being presented in lecture. Attendance is mandatory and classes and associated activities cannot be made up.

C. Field Work:

N/A
D. Other Evaluation Methods:

N/A

E. Grading Scale:

90-100%    A
80-89.9     B
70-79.9     C
60-69.9     D
<60         F

*Quizzes may not be made up if missed.

V. Policies:

A. Attendance Policy:

Pellissippi State expects students to attend all scheduled instructional activities. As a minimum, students in all courses (excluding distance learning courses) must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course. Individual departments/programs/disciplines, with the approval of the vice president of Academic Affairs, may have requirements that are more stringent. In very specific circumstances, an appeal of the policy may be addressed to the head of the department in which the course was taken. If further action is warranted, the appeal may be addressed to the vice president of Academic Affairs.

B. Academic Dishonesty:

Academic misconduct committed either directly or indirectly by an individual or group is subject to disciplinary action. Prohibited activities include but are not limited to the following practices:

• Cheating, including but not limited to unauthorized assistance from material, people, or devices when taking a test, quiz, or examination; writing papers or reports; solving problems; or completing academic assignments.
• Plagiarism, including but not limited to paraphrasing, summarizing, or directly quoting published or unpublished work of another person, including online or computerized services, without proper documentation of the original source.
• Purchasing or otherwise obtaining prewritten essays, research papers, or materials prepared by another person or agency that sells term papers or other academic materials to be presented as one’s own work.
• Taking an exam for another student.
• Providing others with information and/or answers regarding exams, quizzes, homework or other classroom assignments unless explicitly authorized by the instructor.
• Any of the above occurring within the Web or distance learning environment.

C. Accommodations for disabilities:

Students who need accommodations because of a disability, have emergency medical information to share, or need special arrangements in case the building must be evacuated should inform the instructor immediately, privately after class or in her or his office. Students must present a current accommodation plan from a staff member in Services for Students with Disabilities (SSWD) in order to receive accommodations in this course. Services for Students with Disabilities may be contacted by going to Goins 127, 132, 134, 135, 131 or by phone: 539-7153 or TTY 694-6429. More information is available at [http://www.pstcc.edu/sswd/](http://www.pstcc.edu/sswd/).

D. Other Policies:
Cell phones and Lap tops:
Cell phone use is not allowed in the classroom and cell phones should be on off or vibrate and **out of sight**. Any other electronic devices should also remain in silent mode while in class. Exceptions should be discussed with the instructor.

Laptops provided by the school will be used for quizzes and exams. Each student will be assigned a laptop, and will use that same laptop throughout the term. Laptops should be handled with care, and each student should log off the laptop before returning it to the laptop cart after each class. In the NEXT classroom, laptops should be plugged into the nearest cord to the laptop. Laptops are not to be used for social purposes such as Facebook or gmail, or used to work on assignments from other classes. A student may be asked to leave class if these policies are not followed.