COURSE TITLE: PHY 113 - Geology

COURSE DESCRIPTION: PHY-113 Geology is a study of the solid Earth. Topics include minerals and rocks, weathering and soils, glaciers, deserts, earthquakes and volcanism. Special attention will be given to the plate tectonics theory as the unifying theory of geology; the structure of the Earth’s interior, the physiography of continental and oceanic crust, geologic time and Earth history. Laboratory work includes mineral and rock identification based on physical and chemical properties, identification of geologic features and processes which formed these features using topographic maps and use of principles of relative dating to extract sequence of geologic events from rock outcrops.


STUDENT LEARNING OBJECTIVES
The student will be able to:

1. Present the technical terminology of geology and of related scientific disciplines; to develop the student’s competence in reading and recognizing technical and semi popular literature on geological topics.

2. Describe the methods of investigation used to increase our scientific knowledge.

3. Present the results of these investigations: The fundamental patterns, processes and concepts active in geology.

4. Demonstrate the interrelationships among all scientific disciplines.

5. Develop competence in performing laboratory experiments and exercises related to geology.
6. Develop skills in identifying minerals and rocks, interpreting topographic maps of classic areas illustrating geologic processes and recognize phenomena that sculpture and reshape the Earth.

**Student Requirements:**

- The student should study the text and portions of the lab manual as indicated in the general outline. A detailed schedule will be announced by the instructor.

- Audio-visual aids will be used during normal class hours to supplement the text and laboratory manual. A listing of some materials may be found in the library’s audio-visual index under Geology or Earth Science.

- Instructors will describe their own grading and examination policies.

**COURSE OUTLINE:**

The following outline and calendar should be considered as a guide only. Each instructor may alter the choice and sequence of individual topics.

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Week 14  Earthquakes and the Earth’s Interior  Lab 7 – Earthquakes and Earth’s Interior  Lab Manual pp. 91-100

Week 15  Review for Final Exam  Final Exam  Cumulative

NOTE: No make-up tests

EVALUATION:
Quizzes and Lecture Tests ............................... 40%
Labs .......................................................... 30%
Quizzes ..................................................... 20%
Assignments .............................................. 10%
Total ........ 100%

PHY113/fo08

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