

GEOL 110 - Physical Geology Course Outline

Approval Date: 02/13/2019

Effective Date: 06/01/2019

SECTION A

Unique ID Number CCC000264354

Discipline(s) Earth Science

Division Science and Engineering

Subject Area Geology

Subject Code GEOL

Course Number 110

Course Title Physical Geology

TOP Code/SAM Code 1914.00 - Geology/Earth Science, General / E -
Non-Occupational

Rationale for adding this course to the

SECTION B

General Education Information:

SECTION C

Course Description

Repeatability May be repeated 0 times

Catalog Description Uses of geology in society; the nature of rocks and minerals; the dynamic nature of our planet is explored, including mountain building processes, volcanoes, faulting; plate tectonics; earthquakes; geologic time and surface land forming processes.

Schedule Description

SECTION D

Condition on Enrollment

1a. Prerequisite(s): *None*

- c. Soils
- C. Geologic Time and Earth History
 - a. Geologic time
 - b. Relative and Absolute Dating
 - c. Fossils and Fossilization
- D. Earth's Internal Forces
 - a. Plate Tectonics
 - b. Earthquakes
 - c. Vulcanism and Igneous Rocks
 - d. Mountain Building
 - e. Geological Structures
 - f. Metamorphism and Metamorphic Rocks
- E. Earth's External Processes
 - a. Weathering, Mass Wasting and Erosion
 - b. Sediment and Sedimentary Rocks
 - c. Surface Water Processes
 - d. Groundwater Processes
 - e. Oceans and Coastal Processes
 - f. Desert Processes
 - g. Glacial Processes
- F. Earth Resources
 - a. Renewable and Non-Renewable Resources
 - b. Metallogenic Provinces
 - c.

4. Methods of Instruction:

Field Trips:

Lecture:

5. Methods of Evaluation: Describe the general types of evaluations for this course and provide at least two, specific examples.

Typical classroom assessment techniques

- Exams/Tests --
- Quizzes --
- Research Projects --
- Field Trips --
- Home Work --
- Final Exam --
- Mid Term --

Additional assessment information:

Lecture Exams: Three plus a comprehensive Final Exam. Lecture examinations will consist of objective questions in a variety of formats including short answer, multiple choice and essay questions. Typical topics will include the Rock Cycle, the theory of Plate Tectonics and the age of the Earth.

Occasional lecture and lab quizzes: Quizzes are short examinations covering both lecture material and homework exercises.

One or more field trips will be assigned. Field trip location examples would be Pt. Reyes and Mt. Diablo.

Homework assignments: These assignments include the solving of specific gravity problems

