

C-ID Descriptor

Geology of California

Descriptor Details

- **Descriptor Title:** Geology of California
- **C-ID Number:** 200
- **Units:** 3.0
- **Date of Last Revision:** 10/12/2017 04:43:50 PM PDT

General Description

An introduction to the geology of California, including tectonic processes, geologic structures, physiographic provinces, local rocks and minerals, landforms, natural resources, geologic history, and natural hazards in the state.

Prerequisites

No information provided

Corequisites

No information provided

Advisories

Introduction to Geology (C-ID Geology 100), Earth Science (C-ID Geology 120) or Physical Geography (C-ID Geography 110)

Content

The California Geology course must address all of the major categories listed below and at least 75% of the subtopics.

Geologic Evolution of California

- Tectonic Evolution
- Current Geomorphology
- Plate Boundaries
- Volcanoes
- Accretion of Terranes
- Mineral and Energy Resources
- Water Resources

Physiographic Provinces of California

- Cascades
- Modoc Plateau
- Basin and Range
- Sierra Nevada
- Klamaths
- Coast Ranges
- Great Valley
- Mojave Desert
- Transverse Ranges
- Peninsular Ranges
- California Coastline

Faults and Seismicity

- Earthquake History of California
- Faulting and Paleoseismicity
- San Andreas and Other Fault Systems of California

Lab Activities

- Optional Field Trip

Objectives

At the conclusion of this course, the student should be able to:

- 1) Locate the modern plate boundaries in California and describe the landforms, faults and volcanoes associated with each.
- 2) Describe the physiographic provinces of California in terms of rock types, age, and tectonic development.
- 3) Analyze the development and economic potential of natural resources in California based on their geologic setting.
- 4) Assess the geologic hazards and risks associated with different physiographic provinces of California.
- 5) Describe the geologic evolution of California.
- 6) Communicate complex course concepts effectively in writing and diagrams

Evaluation Methods

Shall include multiple measures of performance that may include, but are not limited to:

- Quizzes
- Exams
- Written Assignments
- Research Assignments

Textbooks

California Geology (Prentice Hall – Harden)