

GEOL 7 Course Outline as of Fall 2021**CATALOG INFORMATION**

Dept and Nbr: GEOL 7 Title: GEOLOGY FIELD TRIP

Full Title: Geology Field Trip

Last Reviewed: 3/8/2021

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	1.00	17.5	Lecture Scheduled	17.50
Minimum	1.00	Lab Scheduled	0	1	Lab Scheduled	0
		Contact DHR	6.00		Contact DHR	105.00
		Contact Total	7.00		Contact Total	122.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 35.00

Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

Catalog Description:

Investigation of the geologic features of various locations within California, through field study and observation. Destinations may include Yosemite, Long Valley Caldera, Point Reyes, Bodega Bay, Mt. Lassen, and the Modoc Plateau. Identification of rocks, minerals, landforms, geologic history, and geologic processes in the field. Course includes a four to five day field trip and strenuous hiking. Good overall health and fitness are recommended for anyone considering enrolling in this class.

Prerequisites/Corequisites:

Course Completion of GEOL 1, GEOL 11 or PHYSC 21

Recommended Preparation:**Limits on Enrollment:****Schedule of Classes Information:**

Description: Investigation of the geologic features of various locations within California, through field study and observation. Destinations may include Yosemite, Long Valley Caldera, Point Reyes, Bodega Bay, Mt. Lassen, and the Modoc Plateau. Identification of rocks, minerals,

landforms, geologic history, and geologic processes in the field. Course includes a four to five day field trip and strenuous hiking. Good overall health and fitness are recommended for anyone considering enrolling in this class. (Grade Only)

Prerequisites/Corequisites: Course Completion of GEOL 1, GEOL 11 or PHYSC 21

Recommended:

Limits on Enrollment:

Transfer Credit: CSU;UC.

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	Area	Effective:	Inactive:
CSU GE:	Transfer Area	Effective:	Inactive:

IGETC:	Transfer Area	Effective:	Inactive:
---------------	----------------------	------------	-----------

CSU Transfer:	Transferable	Effective:	Fall 1981	Inactive:
----------------------	--------------	------------	-----------	-----------

UC Transfer:	Transferable	Effective:	Fall 1981	Inactive:
---------------------	--------------	------------	-----------	-----------

CID:

Certificate/Major Applicable:

Both Certificate and Major Applicable

COURSE CONTENT

Student Learning Outcomes:

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

1. Organize field notes into a notebook for future reference.
2. Classify minerals and rocks in the field.
3. Identify prominent geologic features and interpret the geologic history of an area through field studies.

Objectives:

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

1. Record field notes and maintain a field notebook.
2. Identify meaningful field samples.
3. Recognize and interpret the structure, geomorphology, and petrology of the area studied.
4. Reconstruct the historical geology of the area studied.

Topics and Scope:

Course content and topics covered will vary slightly with the specific areas studied, but will include:

- I. Techniques for Geologic Field Observation
- II. Methods for Organizing and Maintaining a Field Notebook
- III. Identification of Rocks and Minerals in the Field
- IV. Interpretation and Synthesis of Geologic History and Geomorphology

All topics are covered in the lecture and lab portions of the course

Assignment:

Lecture- and Lab- Related Assignments:

1. Creating and maintaining a field notebook documenting lecture material, field work and observations, and assessment and interpretation of geological setting recorded throughout the field trip
2. Reading of text and/or instructor-generated material as related to topics/locations studied
3. Exams based on reading, lecture material, and/or field observation (optional). Exams and/or quizzes may include some combination of objective and written responses.
4. Participation in the field

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Maintain field notebook

Writing
50 - 90%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Field work

Problem solving
5 - 20%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Field observations

Skill Demonstrations
0 - 10%

Exams: All forms of formal testing, other than skill performance exams.

Exams and/or quizzes

Exams
0 - 40%

Other: Includes any assessment tools that do not logically fit into the above categories.

Participation in the field

Other Category
0 - 10%

Representative Textbooks and Materials:

Geology Of The Sierra Nevada. Hill, Mary. University of California Press. 2006 (classic)
Fire Mountains Of The West. Harris, Stephen. Mountain Press Publishing Company. 2005 (classic)

Finding Fault In California: An Earthquake Tourist's Guide. Hough, Susan. Mountain Press Publishing Company. 2004 (classic)

Field Guide To The Cascades & Olympics. Whitney, Stephen & Sandelin, Rob. The Mountaineers Books. 2003 (classic)

Geologic Trips, Sierra Nevada. Konigsmark, Ted. Geopress. 2002 (classic)

Roadside Geology Of Northern And Central California. Alt, David and Hyndman, Donald. Mountain Press Publishing Company. 2000 (classic)

A Land In Motion: California's San Andreas Fault. Collier, Michael. University of California Press. 1999 (classic)

Geology Underfoot In Death Valley And Owens Valley. Sharp, Robert and Glazner, Allen. Mountain Press Publishing Company. 1997 (classic)

Earthquake Country: Traveling California's Fault Lines. Ayer, Eleanor. Renaissance House. 1992 (classic)

Instructor prepared materials