

**GEOL 7 Course Outline as of Fall 2015****CATALOG INFORMATION**

Dept and Nbr: GEOL 7                      Title: GEOLOGY FIELD TRIP  
 Full Title: Geology Field Trip  
 Last Reviewed: 4/13/2015

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:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:

<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
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<b>CSU Transfer:</b>	Transferable	Effective:	Fall 1981	Inactive:
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<b>UC Transfer:</b>	Transferable	Effective:	Fall 1981	Inactive:
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**CID:**

**Certificate/Major Applicable:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

**Student Learning Outcomes:**

Upon completion of the course, students will be able to:

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

**Objectives:**

Upon completion of this course, the student will 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:

1. Techniques for geologic field observation.
2. Methods for organizing and maintaining a field notebook.
3. Identification of rocks and minerals in the field.
4. Interpretation and synthesis of geologic history and geomorphology.

**Assignment:**

Assignments vary, but may include the following:

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. Examination based on reading, lecture material, and/or field observation. 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.

Multiple choice, true/false, matching items, completion

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:

Roadside Geology Of Northern And Central California. Alt & Hyndman. Mountain Press Publishing Company: 2000 (classic).

Geology Underfoot In Death Valley And Owens Valley. Sharp & Glazner. Mountain Press Publishing Company: 1997 (classic).

Geology Of The Sierra Nevada. Hill, M. University of California Press: 2006 (classic).

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

Fire Mountains Of The West. Harris, S. Mountain Press Publishing Company: 2005 (classic).

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

A Land In Motion: California's San Andreas Fault. Collier, M. University of California Press:

1999 (classic).

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

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

Instructor prepared materials