ESCI 0055F - WEEKEND FIELD GEOLOGY

Catalog Description

Formerly known as GEOL 52F
Hours: 18 lecture
Description: Weekend (sometimes including Friday) field trips to selected locations of geologic interest in California and bordering areas. Hiking may be necessary. Camping, entrance and transportation fees may be required. (CSU)

Course Student Learning Outcomes

- CSLO #1: Compare and contrast geologic features of specific field localities.
- CSLO #2: Explain geologic processes responsible for producing specific landforms of the area covered.
- CSLO #3: Describe the tectonic setting of area covered.

Effective Term

Fall 2018

Course Type

Credit - Degree-applicable

Contact Hours

18

Outside of Class Hours

36

Total Student Learning Hours

54

Course Objectives

Through hands-on field experiences, discussion and assignments student will be able to:
1. Assess and describe rock lithologies and formations in a field setting;
2. assess, describe, compare and contrast geologic features of the selected area;
3. describe and evaluate the geologic history of the selected area;
4. analyze and evaluate geologic processes and deduce valid conclusions as to the tectonic and erosional activity of the selected area;
5. synthesize geologic information to form conclusions, solve problems, and understand earth processes; and
6. create accurate written field notes.
7. explain proper field etiquette.

General Education Information

- Approved College Associate Degree GE Applicability
- CSU GE Applicability (Recommended-requires CSU approval)
- Cal-GETC Applicability (Recommended - Requires External Approval)
- IGETC Applicability (Recommended-requires CSU/UC approval)

Articulation Information

- CSU Transferable

Methods of Evaluation

- Reports
  - Example: Students will write research paper on a student-identified topic based on the trip. Example: Plate tectonics of the selected area.
- Other
  - Example: Students will create field notes including a clear description of the experience. Strong notes will be carefully written and present information in a road-log that includes mileage, turns, geology, photographs and/or drawings.

Repeatable

No

Methods of Instruction

- Lecture/Discussion

Lecture:

1. Instructor will lecture on the specific geologic history appropriate to the field area. Students are to take notes and be prepared to write a report on their findings.
2. Instructor will provide guidance and specific rules and regulations as to safety and proper field etiquette. Students should actively participate and be able to recite proper field etiquette.
3. Instructor will lecture and provide reading material as to proper field note taking. Students will take proper notes during the field study.

Typical Out of Class Assignments

Reading Assignments

1. Read handouts specific to the field area and be prepared to discuss.
2. Read selected articles that deal with the specific research area and be prepared to discuss with class.

Writing, Problem Solving or Performance

1. Using oral and written guidelines, create accurate field notes. 2. Complete a 2-4 page research paper based upon a topic identified by the student and approved by the instructor.

Other (Term projects, research papers, portfolios, etc.)

Required Materials

- Roadside Geology of Southern California
  - Author: Arthur Gibbs Sylvester and Elizabeth O'Black Gans
  - Publisher: Mountain Press
  - Publication Date: 2016
  - Text Edition:
  - Classic Textbook?:
  - OER Link:
  - OER:
- Roadside Geology of Northern and Central California

- Author: Dave Alt and Don Hyndman
- Publisher: Mountain Press
- Publication Date: 2016
- Text Edition: 2nd
- Classic Textbook?:
- OER Link:
- OER:

Other materials and-or supplies required of students that contribute to the cost of the course.

Map of field area Supplemental library of field area Handouts Selected publications