
**SADDLEBACK COLLEGE
GEOLOGY OF CALIFORNIA**

An overview of the physical and historical geology of California

January 9 – May 17, 2012

Ticket # 21595

Tuesdays 6:00PM–8:50PM

Instructor: Dr. Merton Hill

Office SM 138

Hours: T 7:00-9:30AM & 5:00-6:00PM

Th 8:00-9:30AM

E-mail: mhill@saddleback.edu

Phone: (949) 582-4735

Web site

www.saddleback.edu/faculty/mhill

REQUIRED TEXTS: Geology Underfoot
California Geology

AUTHORS: Sharp & Glazier
Harden

Important Dates

First Week of Class Begins:

1/10/2012

First Class Meeting on:

1/10/2012

Drop with Refund by:

2/14/2012

Elect P/NP by:

2/14/2012

Last Day to Drop

Tuesday, May 15 5:15-7:15

Final:

Learning Objectives

- Identify California's geologic provinces.
- Interpret topographic and geologic maps
- Visualize geologic structures in three dimensions
- Describe and locate California's mountain ranges, rivers, faults, and oil basins.
- Outline the theory of plate tectonics, and describe how California has changed through time as a result of plate tectonics.
- Identify California's various volcano types and their explosive indexes.

Attendance

- This is a fast-paced class and attendance is mandatory.
- Should you discontinue attending the class, please be aware that dropping the class is your responsibility, not mine. See the Saddleback Catalog for attendance policies.
- If you miss class, email me the reason immediately or I may drop you.
- If you miss 6 hours (2 classes) I may drop you.
- If you elect to drop, notify Admissions and Records, otherwise you may receive and "F".
- You **must** attend all student presentations (30 points for attending each day)!

Lectures

- Read the text prior to each class meeting. All material is subject to testing, including lectures, videos, field trip and class discussions (even questions and comments raised by students).
- You are responsible for taking notes during lecture. I do not generally provide my notes to students.
- Advice for adequate note taking: write what I say, not only what I write.
- Practice writing abbreviated notes so you can keep up in lecture. Rewrite your notes in longhand as soon as you have more time (rewriting helps you refresh your memory and recall things you may not have written during lecture).
- Please turn off cell phones prior to entering classroom (if phone rings or you text- you lose 10 points each time).

Tests

- Comprehensive, emphasizing most recent material
- Based on text, lecture, lab, class discussions, videos, etc.
- Short-answer essay, true-false, and multiple choice
- Scan Tron 882 scoring sheets (you supply pencil and scoring sheets)
- Pop quizzes may be given at any time
- No make ups, no extra credit, no cheating, no exceptions

Student Project

Presentation during last week of class on any field trip I approve.

Grades

Based on a modified “historical” curve derived from mid-terms, final, lab exercises, and class participation.

GRADE POINTS	
Final	200
Mid-terms (2 @ 100 points each)	200
Pop quizzes, attendance, participation	~150
Project presentation	100
Minus cell phone penalties	<u>-00?</u>
Total	~650

Learning to Read College Textbooks

English 333– 0.5 unit –1 hour/week
English 337--1 unit–2 hours/week
Applied Psychology 161a–1.5 units

Date	Chapter ¹	Topic
1/10	1	Introduction: <i>Memorize</i> California's provinces; Basic Principles of Geology—Plate tectonics
1/17	2, 3	Rocks: Igneous, sedimentary, metamorphic
1/24	3	Geologic Time—Fossils: <i>Memorize</i> Geologic Time Scale
1/31	4, 12, 13	Geologic maps
2/7	5, 7, 14	California's volcanoes; <i>Memorize</i> Bowen's Reaction Series
2/14	19, 20	More on Volcanoes
2/21	6, 15, 17, 18	Sedimentary rocks, California's deserts
2/28	7	EXAM (Through Deserts), Basin and ranges; faults
3/6	8, 9	Sierra Nevada (Plutonic igneous rocks); Klamath Mountains (Metamorphic rocks)
3-13		Spring Recess
3/20	10, 9, 10	Ground water and Rivers: <i>Memorize</i> California's rivers
3/27	11, 12, 5, 6	The Great Valley; The Coast Ranges
4/3	13, 14, 1, 11	EXAM , (through Coast Ranges): Earthquakes: <i>Memorize</i> California's faults
4/10	15	California's Coast
4/17	16, 2, 4, 8, 16	Transverse Ranges; Los Angeles Basin; <i>Memorize</i> CA Basins
4/24	17, 18 19	Peninsular Ranges, Evolution of California; Hazards; Resources
5/1		PRESENTATIONS (All students must attend--30 points)
5/8		PRESENTATIONS (All students must attend--30 points)
5/15		Final (5:15--7:15)

¹ Normal type = California Geology, **Bold type = Geology Underfoot**