

Earth Sciences 5: California Geology Laboratory Summer Session 2 2024

Time/Location: Monday/Wednesday 9am-12:30 pm; Baskin Engineering 165

Instructor: Sarah Neuhaus

Contact Info: I prefer email: suneuhau@ucsc.edu.

Office Hours: Thursday 10 am – 12 pm in EMS D226, or by appointment

TA: Emily Piper; ekpiper@ucsc.edu, Office hours: Monday 1-2pm and Wednesday 3:30-4:30 pm in EMS D226

Class website: <https://canvas.ucsc.edu>. I like to use the **Modules** function on Canvas. There is a Module for each Week which contains the readings, lectures, links to the on-line quizzes etc. **NOTE!!!** All the modules are currently filled with the readings only. **The lectures, quizzes and homeworks will be posted as the quarter progresses.**

Text and Readings: I will post readings on Canvas to augment the lecture material – I will have the weekly readings under the Module for each week. I primarily use scanned chapters from Debra Harden’s (out of print) book “California Geology” augmented in the early weeks by selected book chapters. Use the **lecture content** as a guide for what I think is important!! The readings will give you extra information and expand upon the lecture material – use it if it helps you. I **never** give quiz or test questions that come only from the readings.

Assesment: Please read the document on course assessment posted on Canvas which gives more detailed info. Briefly there are: 1) **short on-line quizzes** associated with most of the lectures 2) **three homework assignments** (one of which is a campus field trip assignment) and 3) **four longer Midterm Quizzes**. All of the quizzes will be taken through Canvas. All deadlines are given on Canvas but in general the lecture quizzes will be due two days after they are assigned and homeworks will be due Fridays at midnight. For the first three Midterm Quizzes you will have a 42 hour window beginning on Thursdays at 6 am and ending Friday at 12 am (midnight) – you may take the midterm quiz anytime in that window but once you start you will have 75 minutes. For Midterm Quiz #4, you will have a 42 hour window beginning Wednesday at 6am and ending Thursday at midnight. (Canvas kicks you out before Friday August 30th, so the exam has to be shifted up one day.) If you have a DRC accommodation, I will adjust your times in accord with your accommodation. My goal with the deadlines is to encourage you keep up with the class and not to get behind –summer session goes fast and there is a lot of material to cover in just 5 weeks.

If you are planning on being a UCSC EPS Major or Minor you will need to take the accompanying lab course EART 5L.

WEEKLY SCHEDULE
EART 5
Summer Session 2: 2024

WEEK 1 (July 29-August 2)

Lecture Topics: Class Intro; Plate Tectonics, & Earth Structure; Minerals and Rocks relevant to California Geology

Reading: Readings #1, #2, #3 from the website

Assignments: short on-line quizzes following each lecture; Homework #1; Midterm Quiz #1

WEEK 2 (August 5-9)

Lecture Topics: Geologic Time; California's Young Volcanoes Parts 1 and 2; Sierra Nevada; Geologic Structures (faults etc.); Economic Geology of California (gold and other valuable minerals)

Assignments: short quizzes following each lecture; Midterm Quiz #2

WEEK 3 (August 12-16)

Lecture Topics: Coast Ranges and Great Valley; San Andreas Fault; Earthquakes

Reading: Harden Chap. 8 (156-198), Chapters 11, Chap 12, 13, 14

Assignments: short quizzes following each lecture ; Homework #2, Midterm Quiz #3

WEEK 4 (August 19-23)

Lecture Topics: Remote Campus Field Trip; CA Water Resources; Groundwater and Karst; CA Tectonics and Coastlines;

Reading: Harden Chapter 15

Assignments: short quizzes following each lecture; Homework #3 (Field Trip Exercise)

***** CAMPUS FIELD TRIP ON AUGUST 19TH *****

WEEK 5 (August 26 -30)

Lecture Topics: Waves, Shorelines and Tsunamis; Ice Ages and CA Glaciers; CA Climate; Deserts; CA Oil Resources and the Transverse Ranges; California Geologic History – putting it all together...

Reading: Harden Chapter 6, Harden Chap. 8 (198-212), Chap 16, Chap 18

Assignments: short quizzes following each lecture; Midterm #4