

GEL 17 Earthquakes and Other Earth Hazards Class Syllabus

Professor: Mark DeBlois, PhD (mcdeblois@ucdavis.edu)

Pronouns: he/him/his

Lecture Hours: Giedt 1001; MW 2:10 - 3:00 pm

Lecture ZOOM Link (until Jan. 28): <https://ucdavis.zoom.us/j/91473242628>

Office hour: EPHSCI 2242 (on your right as you exit the elevator)

ZOOM link: <https://ucdavis.zoom.us/j/96849528675>

Or by appointment

Textbook (**optional**):

Natural Hazards Earths Processes as Hazards, Disasters, and Catastrophes, 4th edition. E. A. Keller and D. E. DeVecchio. Routledge

Course overview:

- This course is about natural hazards with a focus on earthquakes, which is most likely to affect residents of the Bay Area and Southern California. Other hazards that we will cover include but are not limited to tsunamis, landslides, volcanic eruptions, and flooding. We will discuss the societal impacts and prediction, preparation, and mitigation methods. GE credit: SE, SL

- The textbook readings will supplement the lecture material; however, the exams will *only* test you on the material we covered in class. You are highly encouraged to attend each lecture and take notes. Lecture slides will be available as PDFs on CANVAS in the FILES section.

Email etiquette:

Write "GEL17" in the beginning of the subject line so that I can identify and address your email in a timely manner.

Grading policy:

- Final course grade is based on three exams (2 midterms and 1 final).

- You will **not** be allowed to take a quiz or exam outside the scheduled exam period without prior authorization by the instructor, a documented excuse, or unforeseen emergency. Contact me as soon as possible if you miss a quiz or exam.

Grading:

Midterm1 Exam	(Wednesday, February 2):	30%
Midterm2 Exam	(Wednesday, February 23):	30%
Final Exam	(Monday, March 14, 8:00 - 10:00 am):	40%

Extra Credit:

Aloha Bonus Quiz - There will be a short extra credit quiz available every week on CANVAS under QUIZZES. You will have 5 min to answer 4 multiple choice questions. The window to take the quiz is from Wednesday at 4 pm until Monday at 2:10 pm. The quiz will focus on recent lectures but may include anything we covered previously. These quizzes are meant to give you feedback on your understanding of the main topics of the week.

Final course grades are based on the following scale:

A	>93%	C	73-76%
A-	90-92%	C-	70-72%
B+	87-89%	D+	67-69%
B	83-86%	D	63-66%
B-	80-82%	D-	60-62%
C+	77-79%	F	<60%

Academic Integrity:

Acts of academic dishonesty will be referred to the Office of Student Support & Judicial Affairs. You are responsible for understanding and following the UC Davis Policy on Student Conduct and Discipline. For more information refer to this website: <http://sja.ucdavis.edu/academic-integrity.html>

Students with Disabilities:

Any student who needs extra accommodation based on the impact of a disability is encouraged to contact the Student Disability Center at (530) 752-3184 so that appropriate accommodation could be implemented.

Sexual Harassment Policy:

For more information on recognizing and reporting inappropriate behavior, please visit the university websites about the Sexual Harassment Education Program on campus such as the following:

<https://hdapp.ucdavis.edu>

<https://sexualviolence.ucdavis.edu>

Course Schedule: (subject to change)

M 1/03: L01 Introduction to Earth Science

W 1/05: L02 Plate tectonics and Earth hazards; Aloha Quiz 1

M 1/10: L02 Plate tectonics and Earth hazards (continued)

W 1/12: L03 Earthquake Mechanics; Aloha Quiz 2

M 1/17: **No Class - Martin Luther King, Jr. Holiday**

W 1/19: L03 Earthquake Mechanics (continued); Aloha Quiz 3

M 1/24: L04 Seismic Waves and Locating Earthquakes

W 1/26: L05 Measuring Earthquakes; Aloha Quiz 4

M 1/31: L05 Measuring Earthquakes

W 2/02: Midterm1 Exam (L01-L04)

M 2/07: L06 Earthquake Hazards; Aloha Quiz 5

W 2/09: L06 Earthquake Hazards; Aloha Quiz 6

M 2/14: L07 Tsunamis

W 2/16: L08 Forecasting Earthquake; Aloha Quiz 7

M 2/21: **No Class - Presidents' Day Holiday**

W 2/23: Midterm2 Exam (L05-L08)

M 2/28: L09 Volcanoes; Aloha Quiz 8

W 3/02: L09 Volcanic Hazards

M 3/07: L10 Floods and Human Interaction with Rivers; Aloha Quiz 9

W 3/09: L10 Floods and Human Interaction with Rivers (continued); Aloha Quiz 10

Final Exam (comprehensive with focus on L09-L10)

- Monday, 3/14, 8-10 am