

## **GEL 17 Earthquakes and Other Earth Hazards**

### **Fall Quarter 2020 Class Syllabus**

Professor: Mark DeBlois, PhD (mcdeblois@ucdavis.edu)  
Pronouns: he/him/his  
**Lecture** Hours: TR 10:00 - 10:50 am  
**Lecture** ZOOM Link: <https://ucdavis.zoom.us/j/93241338746>

#### **Office hour & ZOOM Link:**

Wednesdays --> 10:00 - 11:00 am: <https://ucdavis.zoom.us/j/91491589025>  
Thursdays --> 9:00 - 10:00 am: <https://ucdavis.zoom.us/j/99867534536>  
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, wildfires, volcanic eruptions, and asteroid impacts. We will discuss the societal impacts and prediction, preparation, and mitigation methods. GE credit: SE, SL

The textbook is optional. The exams will *only* cover the material we covered in class. ZOOM lectures will **NOT** be recorded due to privacy, copyright, and logistical issues. You are highly encouraged to attend each live ZOOM lecture and take notes. Lecture slides will be available as PDFs on CANVAS (in the FILES tab).

#### **ZOOM etiquette:**

While in class, you are expected to be respectful of others. You are expected to minimize unnecessary noise or discussions not related to the course. That said, I highly encourage you to participate in class.

#### **Email etiquette:**

Include "GEL17" in the beginning of the subject line of your email. You are encouraged to come to my ZOOM office hours (link above) to discuss any questions pertaining to the course and lecture material. If you are unable to meet during the scheduled office hours, please email me to arrange another time to meet. I typically will not be answering emails after 5 pm or anytime on weekends.

#### **Grading policy:**

Final course grade is based on three exams (2 midterms and 1 final). You will **not** be allowed to take an exam outside the scheduled exam period without prior authorization by the instructor, a documented excuse, or unforeseen emergency.

All exams will be administered through the Quizzes section of CANVAS. It will **only** be available during the period specified by the instructor and you will only have the specified amount of time to finish. If you encounter interruptions during your exam such as loss of internet, it is your responsibility to inform the instructor by email as soon as possible in order to receive reasonable accommodation.

Grading:

<b>Midterm Exam1</b>	(Tuesday, November 3):	30%
<b>Midterm Exam2</b>	(Tuesday, November 24):	30%
<b>Final Exam</b>	(Friday, December 18, 3:30 - 5:30 pm):	40%

Extra Credit:

**Aloha Thursday quiz** - There will be a short extra credit quiz on CANVAS every Thursday due before the beginning of class. The quiz will emphasize the previous week's lecture but may include anything we covered previously.

Final course grades 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)

10/1: L01 Introduction and course overview

10/6 - 10/8:

L02 Plate tectonics and Earth hazards

Aloha Quiz 1 complete by Thursday before class  
10/13 - 10/15:  
L02 Plate tectonics and Earth hazards (continued)  
L03 Faults and earthquakes; Measuring earthquakes  
Aloha Quiz 2 complete by Thursday before class  
10/20 - 10/22:  
L03 Faults and earthquakes; Measuring earthquakes  
Aloha Quiz 3 complete by Thursday before class  
10/27 - 10/29:  
L04 Major faults and earthquakes of California and the world  
Aloha Quiz 4 complete by Thursday before class  
11/3 - 11/5:  
**Midterm1 Exam** (L01-L04) - Tuesday, 11/3 from 10:00 - 10:50 am  
L05 Earthquake forecasting and Risk  
Aloha Quiz 5 complete by Thursday before class  
11/10 - 11/12:  
L06 Tsunami  
L07 Volcanic hazards  
Aloha Quiz 6 complete by Friday before class  
11/17 - 11/19:  
L07 Volcanic hazards (continued)  
Aloha Quiz 7 complete by Thursday before class  
11/24  
**Midterm2 Exam** (L05-L07) - Tuesday, 11/24 from 10:00 - 10:50 am  
Aloha Quiz 8 complete by Tuesday 11/24 by 11:59 pm  
**11/26 Thanksgiving Holiday - NO CLASS**  
12/1 - 12/3:  
L08 Floods and human interaction with rivers  
Aloha Quiz 9 complete by Thursday before class  
12/8 - 12/10:  
L09 Impacts with objects from space  
Aloha Quiz 10 complete by Thursday before class  
**Final Exam** (comprehensive with focus on L08-L9) - Friday, 12/18 from 3:30 - 5:30 pm