

Syllabus

EART 3: Geology of National Parks Online

Course Syllabus Winter Quarter 2018

About

Three Earth Science faculty members from UC Santa Cruz, UC Davis, and UC San Diego collaboratively created Geology of National Parks Online. This course will cover introductory geologic concepts as they apply to U.S. National Parks. The “learning management system” for this class is called Canvas. *It’s important to understand up front that this online course will require an equal effort as would a similar face-to-face class.*

Through activities, mini-lectures, and readings from the textbook, we’ll explore how geologic processes influence the landscapes in our national parks. Along the way you’ll learn about the concepts of geologic time, plate tectonics, and how the rocks composing the parks can be used to reconstruct their geologic origins. The intent is to make your next visit to a national park a more rewarding experience because you’ll understand what you’re seeing on a deeper level.

To download a PDF of this syllabus, go to [EART3_syl_18.pdf](#)

Instructors

Prof. Susan Schwartz, UC Santa Cruz: syschwar@ucsc.edu

Esteban Chaves, TA, UC Santa Cruz: chavess@ucsc.edu

Online Office Hours

Office hours will be held using the Canvas Conferencing software, accessed via the Conferences tool on the left column of the course home page. Susan's office hours are Mondays 11-12 AM and Wednesday 3-4 PM. Esteban's TA office hours will be Mondays 6-7 PM, Thursday 8-9 PM. For both Monday holidays (January 15 and February 19), assignments are due on the following Tuesday and office hours will be moved to Tuesday at the same time

Textbook

Exploring Geology, 3rd or 4th edition, by Stephen Reynolds, Julia Johnson, Paul Morin, and Chuck Carter (hard copy or ebook). I would suggest getting the ebook or buying a used hardcopy. The UCSC has some used copies for sale You'll be expected to read select sections of the book and the quizzes and exams will have questions from the reading. The textbook is an important component of the course, so don't delay in getting it.

Module Workflow

Read & Watch (3-4 hours per module)

- Watch each mini-lecture – **take notes** as you would in a face-to-face class
- Read assigned text – **take notes** that relate to the material in the mini-lectures
- You may find it beneficial to alternate reading and watching

Apply (1-3 hours per module)

- Watch the tutorials and walk-through videos as necessary
- Complete the module activity and submit

Connect (1 hour per module)

- Interact with your classmates and instructors through Piazza and Conference

Assess

- You must complete a module quiz before moving on to the next module

There are hard deadlines for submitting assignments and taking quizzes and exams that are intended to keep you on pace to finish the course in 10 weeks. Download the syllabus you're currently reading from the link above and follow it closely as the course progresses.

You will not be able to access a module activity or module quiz after the deadline has passed. Please be sure to maintain a pace and submit each activity and module quiz before each deadline. **We will not accept late work.**

Module Activities

Each module has a hands-on activity designed to expand upon the course material in the mini-lectures and readings. These activities would typically be completed during a Discussion section in a face-to-face class. You will be provided with video tutorials and walk-throughs to help with the activities and your professor and TA will be available during office hours and via Piazza.

No late assignments will be accepted but your lowest activity score will be dropped from the computation of your class grade.

Quizzes

There are three different uses of the term “quiz” in this course: (This is an unavoidable Canvas thing.)

1. Module "quizzes" – these are short and easy quizzes that assess your understanding of the overall module. You will have unlimited attempts to complete each module quiz.
2. “Quiz1” and “Quiz 2”- these cover material from Modules 1-3 (Quiz 1) and 6-8 (Quiz 2) and have 25 questions each. Unlike the end of module quizzes, you will only have 1 chance to submit these quizzes, so you will need to study ahead of time. You will have 30 minutes to complete each quiz.
3. Activity “quizzes” – within each activity, Canvas asks you to “Take the Quiz,” which is Canvas-speak for answering questions associated with the activity.

Exams

Students need to plan to take the midterm and final exam online on the specific dates and times scheduled. The midterm will be an 1 hour timed exam and the final a 2 hour timed exam administered online by Proctor U (for a fee of \$17.50 for the midterm and \$25.00 for the final) on the dates indicated below.

- **Midterm: Thursday, February 15, one hour between 8 AM and 10 PM**
- **Final: Wednesday, March 21, two hours by appointment between 8 AM and 10 PM**

Grading

Total points = 960 (Lowest Activity Grade Worth 40 Points Will Be Dropped)

1 Final (Multiple Choice)	25%	250 pts
1 Midterm (Multiple Choice)	15%	150 pts
2 Quizzes	10%	100 pts
10 Module Activities	40%	400 pts
10 Module Quizzes	10%	100 pts

There is 1 extra credit activity in Module 2, Grand Canyon Expedition, that can be completed any time before the end of the class. This assignment will be worth 20 points.

Final letter grades will be curved, based on the distribution of point totals. So your grade will be dictated by how you do relative to your peers, as is the case with all curve-based grading schemes. More detail on this later.

Academic Integrity

- We expect the highest levels of academic integrity in this class. Any suspected cheating will be dealt with following the UCSC Academic Misconduct policy (https://www.ue.ucsc.edu/academic_misconduct) for adjudication.

- Work may be collaboratively done, but the work that you hand in must be your own. A simple way to figure out if the work is your own is to ask whether or not you can reproduce it completely without the aid of other people.

Content Overview

*The midterm and final exams are the only time students will be required to complete class work within a specified window of time

Week	Modules	Geologic Province	National Park
1 (Jan. 8-12)	Module 1	Colorado Plateau	Grand Canyon
2 (Jan. 16-19)	Module 2		
3 (Jan. 22-26)	Module 3		Zion, Bryce Arches, Canyonlands
Jan. 31	Modules 1-3	QUIZ 1	
4 (Jan 29-Feb. 2)	Module 4	Cascade Range	Mount Rainier Mount St. Helens Crater Lake Lassen
5 (Feb. 5-9)	Module 5	Hotspot Volcanism	Hawai'i Volcanoes
Feb. 15	Midterm Exam*		
6 (Feb. 12-16)	Module 6	Sierra Nevada	Yosemite Kings Canyon
7 (Feb. 20-23)	Module 7	Rocky Mountains	Rocky Mountain
8 (Feb. 26-March 2)	Module 8	Basin and Range	Death Valley
March 7	Modules 6-8	QUIZ 2	
9 (March 5-9)	Module 9	San Andreas Fault	Pinnacles Point
10 (March 12-16)	Module 10	American West Synthesis	
March 21	Final Exam*		

