

EART 3: Geology of National Parks Online

Course Syllabus Summer Quarter 2019

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 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_su19.pdf](#)

Instructors

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

Genesis Berlanga, TA, UC Santa Cruz: gberlang@ucsc.edu

Cara Vennari, TA, UC Santa Cruz: cvennari@ucsc.edu

Online Office Hours

Office hours will be held using the Zoom Conferencing software, accessed via the Online Meeting tool on the left column of the course home page. Office hours are Monday 7-8PM, Tuesday 5-6 PM, Wednesday 11-12 AM, Thursday 6-7 PM, Friday 2-3 PM and by appointment.

Textbook

Exploring Geology, 3rd, 4th, or 5th 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 bookstore 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

(Two modules per week)

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 Office Hours

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 5 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 two 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. 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 that will need to be completed on the date and time frame listed below. The final will be a 2 hour exam administered online by Proctor U (for a fee of \$13.00) on the date indicated below and during a pre-scheduled time.

- **Midterm: Wednesday, July 10, one hour between 4-10 PM**
- **Final: Friday, July 26, two hours by appointment between 8AM and 10PM**

Grading

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

1 Final (Multiple Choice)	35%	350 pts
1 Midterm (Multiple Choice)	15%	150 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.

Important Summer Session I Dates

Last day to drop a class is Monday, July 1
Last day to request a "W" is Friday, July 12

For all dates and deadlines, including 'change of grade option' (P/NP) and grades due, here is the summer academic calendar:

<https://summer.ucsc.edu/studentlife/index.html>

Academic Integrity

Academic integrity is the cornerstone of a university education. Academic dishonesty diminishes the university as an institution and all members of the university community. It tarnishes the value of a UCSC degree.

All members of the UCSC community have an explicit responsibility to foster an environment of trust, honesty, fairness, respect, and responsibility. All members of the university community are expected to present as their original work only that which is truly their own. All members of the community are expected to report observed instances of cheating, plagiarism, and other forms of academic dishonesty in order to ensure that the integrity of scholarship is valued and preserved at UCSC.

In the event a student is found in violation of the UCSC Academic Integrity policy, he or she may face both academic sanctions imposed by the instructor of record and disciplinary sanctions imposed either by the provost of his or her college or the Academic Tribunal convened to hear the case. Violations of the Academic Integrity policy can result in dismissal from the university and a permanent notation on a student's transcript.

For the full policy and disciplinary procedures on academic dishonesty, students and instructors should refer to the [Academic Integrity page](#) at the Division of Undergraduate Education.

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

DRC Accommodations

The Disability Resources Center reduces barriers to inclusion and full participation for students with disabilities by providing support to individually determine reasonable academic accommodations. If you have questions or concerns about exam accommodations or any other disability related matter please contact the DRC office located in Hahn 125 or at 831-459-2089 or drc@ucsc.edu

Title IX

The university cherishes the free and open exchange of ideas and enlargement of knowledge. To maintain this freedom and openness requires objectivity, mutual trust, and confidence; it requires the absence of coercion, intimidation, or exploitation. The principal responsibility for maintaining these conditions must rest upon those members of the university community who exercise most authority and leadership: faculty, managers, and supervisors.

The university has therefore instituted a number of measures designed to protect its community from sex discrimination, sexual harassment, sexual violence, and other related prohibited conduct. [Information about the Title IX Office](#), the [online reporting link](#), applicable campus [resources](#), reporting responsibilities, the [UC Policy on Sexual Violence and Sexual Harassment](#) and the UC Santa Cruz Procedures for Reporting and Responding to Reports of Sexual Violence and Sexual Harassment can be found at titleix.ucsc.edu.

The Title IX/Sexual Harassment Office is located at 105 Kerr Hall. In addition to the [online reporting option](#), you can contact the Title IX Office by calling 831-459-2462.

• **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
June 24- June 28	Module 1		Grand Canyon
	Module 2		
July 1-5	Module 3	Colorado Plateau	Zion, Bryce Arches, Canyonlands
	Module 4	Cascade Range	Mount Rainier Mount St. Helens Crater Lake Lassen Volcanic
July 8-12	Module 5	Hotspot Volcanism	Hawai'i Volcanoes Yellowstone
July 10	Midterm Exam*		
	Module 6	Sierra Nevada	Yosemite Kings Canyon Sequoia
July 15-19	Module 7	Rocky Mountains	Rocky Mountain Glacier
	Module 8	Basin and Range	Death Valley Grand Teton
July 22- 26	Module 9	San Andreas Fault	Pinnacles Point Reyes
	Module 10	American West Synthesis	
July 26	Final Exam*		

