

Syllabus

Fall 2026

GEOL 210 Introduction to Geologic Field Methods

First meeting on campus

August 26 at 1:00 pm

To Bishop, California, and back

August 27 – September 10

On campus meetings

September 11-12

Course description: This course is intended for students who are considering or planning on majoring in the Geological Sciences and related fields. You will have the opportunity to apply your knowledge from introductory geology courses to a spectacular field location in eastern California, where you will learn standard geologic field techniques and data analysis.

When we return to campus, we will spend two days in the computer lab introducing you to ArcPRO and mapping digitally.

Instructors

Anne Egger

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Discovery Hall 337

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Overview and course goals

The discipline of geology is grounded in observations of the Earth. Geologists make observations of the Earth at all scales, from a satellite image to an outcrop to a hand sample to a microscopic image; they place these observations within geographic, spatial, and temporal frameworks in order to draw conclusions about processes that have occurred within the complex Earth system. The skills involved in making these types of observations and using them as evidence are critical for students of geology to learn, but are also important for anyone who will be teaching Earth science or working with geoscientists in the future.

The **primary goal** of this course is to provide you with the opportunity to learn and apply these skills that are fundamental to the discipline. By the end of this course, you will be able to:

- Collect and record data using common geologic field methods and tools;
- Synthesize geologic data you've collected in the field by producing geologic maps and cross-sections;
- Develop a reasonable geologic history based on multiple lines of evidence.

These are not the only goals we have, however, because we could do that without ever leaving Ellensburg. Our **additional goals** are to:

- Expose you to a spectacular environment, where several different geologic processes are present and well-exposed;
- Build a community of undergraduates who are interested in and excited about geology.

In order to achieve these goals, we will travel to Owens Valley in California, on the eastern side of the Sierra Nevada, and spend ten days working in two different field areas. This is a familiar and favorite area for many geologists, your instructors included, and we think you will see why very quickly.

Logistics

Registration

GEOL 210 is a Fall Quarter course for 4 credits and enrollment is “by permission only.” Please send your name ID number to Anne Egger (Anne.Egger@cwu.edu) to be given permission. Registration for Fall Quarter opens May 11; you must be registered for GEOL 210 by August 10 for us to confirm our vans and lodging.

Course fee

The course fee of **\$1200** that will appear on your Fall term tuition bill pays for (1) food & lodging at the White Mountain Research Center, (2) CWU van transportation, (3) a drafting kit, map board, and course packet.

Insurance, liability, and food

To help us keep you safe and healthy throughout the course, you will fill out and return a form about insurance, liability, and the drug/alcohol policy. Note that this is a dry trip. Drinking will not be tolerated. If you are caught with alcohol at any time on the trip, you will be sent home and will not complete the course. Seriously.

Another important part of this form is letting us know about food allergies so that we can tell the cooks at the field station. Please download it from the website and return it, filled out, to Anne Egger (Anne.Egger@cwu.edu).

Course materials and gear

There is no textbook for this course, and all materials are included as part of the course fee. The equipment list describes the gear you need to have a productive time in the field. You can find it on the GEOL 210 website (<https://www.cwu.edu/academics/geology/student-resources/courses/geol-210.php>).

Where we stay

We stay at a field station that is part of the White Mountain Research Center (WMRC), owned by the University of California. We will spend our time at the Owens Valley Laboratory (OVL), near Bishop, CA. There are dorms with beds and showers; and coin-operated laundry facilities are available. WMRC has excellent cooks who feed us well; **the stations are tobacco-free**. The address for WMRC is 3000 East Line Street, Bishop, CA 93514, phone: 760-873-4344.

Schedule

Wednesday, August 26	1:00 pm	Packing Meeting	Discovery Hall 110
Thursday, August 27	6:00 am	Meet at Discovery Hall and leave Ellensburg	
Friday, August 28	5:00 pm	Arrive in Bishop	
Sat., Aug. 29–Tues., Sept. 8		Field work!	
Wednesday, Sept. 9	8:30 am	Depart Bishop	
Thursday, Sept. 10	5:00 pm	Arrive in Ellensburg	
Friday, Sept. 11	1:00-5:00 pm	Discovery Hall 105 computer lab	
Saturday, Sept. 12	10:00-12:00; 1:00-5:00 pm	Discovery Hall 105 computer lab	

The nature of field work

The Owens Valley is high desert. Most of our field work will take place between 4500’ and 6500’ and daytime temperatures can reach the upper 90’s (or even low 100’s). We will be hiking and working outside most days from 8:30 to 4:30, and it is important to take care of yourself by wearing sunscreen, drinking water, eating enough food, and wearing a hat and appropriate clothing. You can also help prepare yourself by doing some walking and hiking this summer before our trip, but the work we do is accessible for people at many different fitness levels.

Van drivers

We need students who are comfortable driving loaded 8-person vans. You do not need to take a van safety test, but we are looking for people who have experience driving large vehicles. We will need at least six students (in addition to the TAs) in order to have two drivers per vehicle. On the day we pack up, drivers will go with the TAs to Motorpool, where they will make a copy of your driver’s license.

On the road, we caravan in a pre-defined order. The person sitting shotgun has the job of navigator and comms operator (that means being in charge of the radio). The navigator and driver are a team! Keep both the vehicle in front of you and behind you in view. The navigator’s responsibilities are to help the driver pay attention to directions, make sure the radio is on, and stay in communication with the other vehicles. We will carry radios and share cell phone numbers to contact one another if necessary and try to give advance warning for all maneuvers.

Assessment

Grading is based on the assignments and point values below, and will follow a grading scale (90-100% → A- to A; 80-89% → B- to B+; 70-79% → C- to C+; 60-69% → D- to D+; <60% → F).

Assignment		Points	Project points
Big Pine project	Map	10	
	Descriptions	10	20
Owens Valley project	Fish Springs Hills map	25	
	Cinder cone map	15	
	Cross-sections	10	
	Regional map	10	
	Geologic history	15	
	Field notebook	10	
	Unit descriptions	15	100
Poleta project	Map and explanation	60	
	Cross-section	20	
	Stratigraphic column	20	100
Digitized map	Owens Valley digital map	40	40
		Total	260 pts

More details on the expectations for each of these projects will be in the coursepack you receive on the first day of class.

University Policies

Academic Dishonesty

Students are on their honor to follow the student conduct code as outlined in the [Washington Administrative Code](#). Violations of this section will result in a failing grade in the course in addition to further possible university sanctions.

Academic dishonesty is defined in the [Washington Administrative Code \(WAC\) 106-125-20 Prohibited Student Conduct](#).

- Violation of an instructor's written policy on the use of artificial intelligence (AI) tools for coursework shall be considered an instance of academic dishonesty.
- Faculty who suspect students of academic dishonesty must follow the procedure outlined in CWUR 2-90-040(25).
- Students found responsible of academic dishonesty violations in a course will be prohibited from completing an SEOI for the course.
- Withdrawing from a course does not excuse academic dishonesty. In circumstances when academic dishonesty is confirmed, a W can be replaced by a letter grade (see CWUP 5-90-040(13)).

Policy on Diversity

University-level education is about broadening horizons and looking at academic issues from a variety of perspectives. The participants in this class are encouraged to bring their own life experiences and viewpoints to bear on classroom discussions and assignments. Along with the freedom to express one's own views comes the responsibility to respect the views of others. No student will be discriminated against based on race, ethnicity, age, creed, religion, gender, sexual orientation, marital status, or political ideology.

Sexual Misconduct & Student Support

Central Washington University is committed to providing all community members with a learning and work environment that is free from [sexual misconduct](#) and discrimination. Students have [rights and options](#) for getting help if they have experienced sexual misconduct or discrimination. Information can be found at the [Office for Civil Rights Compliance website](#) or by contacting the [Title IX Coordinator](#). As [Responsible Employees](#), all faculty and staff are required to report information regarding sexual misconduct or related incidents and disclosures regarding sexual misconduct and discrimination to the [Title IX Coordinator](#), unless they are designated as a confidential resource. Students may receive confidential support by contacting [CWU PATH](#), 509-963-3213 or PATH@cwu.edu, or [CWU Student Counseling Services](#), 509-963-1391.

Disability Services

Central Washington University is committed to creating a learning environment that meets the needs of its diverse student body. If you anticipate or experience any obstacles to learning, contact Disability Services to discuss a range of available options. Student Disability Services is located in Bouillon Hall 205. Call (509) 963-2214 or [email ds@cwu.edu](mailto:email_ds@cwu.edu) for more information.

Religious Holiday

University Policy, CWUP 5-90-040(39), provides for reasonable accommodation of student absences for religious holidays in accordance with [RCW 28B.137.010](#). Students seeking reasonable accommodations under this policy must provide written notice to their instructors within the first two weeks of class specifying the dates for which religious accommodations are requested. Contact the Vice President of Student Engagement and Success at (509) 963-1515 for further information.

Mental Health

Stress and other life circumstances that may be out of your control can make learning and focusing difficult. If you find stress or other mental health concerns make academics difficult, Central has resources to support you. We encourage you to reach out as soon as you notice you're struggling.

- **Student Counseling Services** (*crisis appointments available*) – 509-963-1391 – <https://www.cwu.edu/student-life/health-wellness-services/counseling-services/>
- **24/7/365 mental health support** can be accessed through *TimelyCare* at no additional cost to enrolled students. Register with your CWU email for access at <https://timelycare.com/>
- **Mental health crisis support** outside of normal business hours – 1-800-273-8255; Text HOME to 741741; Call 9-1-1; see more options on Counseling Services website
- **Wellness Center** (*confidential help with substance misuse and sexual violence*) – 509-963-3213 – <https://www.cwu.edu/student-life/health-wellness-services/>
- **Case Management** (*connect students with resources and support those most at-risk*) – 509-963-1515 – <https://www.cwu.edu/about/offices/case-management/>