

Geology in the Pacific Northwest: Foundations Seminar

Spring 2026

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Program Overview

Geology Seminar is a 2-credit offering for in-depth mentored investigation into fundamental patterns and processes in geology. This course is designed for students with little or no previous background in geology, but each quarter's offering will follow the previous quarter's content. New students joining in the spring will need to do some reading of the textbook to catch up from previous quarters (contact the faculty for details). Students meet approximately bi-weekly in the Evergreen Geology Lab where they receive guest lectures, review book chapters, and hold seminar discussions related to major geologic phenomena and features of the Pacific Northwest. Topics include major geologic formations, terranes, earthquakes, and mountain-building events (orogenies) in the Pacific Northwest. Book chapters will be supplemented with reading from the primary literature. One Saturday field trip in Spring will involve a tour of major geologic formations in Washington. In Spring quarter, additional asynchronous material will supplement in-person meetings. Students are welcome to take this course for one quarter or multiple quarters. The content will not repeat.

SPRING SCHEDULE

We will meet in the Geology Lab (Lab II, 3209) approximately every other Wednesday at 12-1PM (see Canvas and Schedule below). Many meetings will not go beyond 1PM. But it will be a good idea to schedule out extra time just in case, and to work on a final project. We will have one Saturday or Sunday Field Trip to the east side of the Cascades.

Dates are followed by readings. Please do all reading listed before the next date with the exception of the field trip day – Please read all the field trip material BEFORE the field trip.

Weds, Week 1, 12pm-1pm: Introductions and setting up for the quarter

Reading: *Roadside Geology of Washington (RGW): pp. 1-16; Living with Thunder (Chapters 1-5)*

Watch Videos: [Terranes with Nick](#); [Assembling PNW Terranes](#); [Nick on the Rocks Terranes of the Puget Sound](#)

Weds. Week 3, 12pm-1pm: Discussion of PNW terranes and geologic history of major landforms

Reading: *Roadside Geology of Washington (RGW): pp. 16-21; Living with Thunder (Chapters 6-12)*

Watch Videos: [Nick on the Rocks – Flood Basalts](#)

Saturday-Sunday, Week 5 ALL DAY: field trip to Eastern Washington flood basalts and back!

Read BEFORE Trip: RGW: pp. 71-75, 86-88, 119-126, 177-187, and 265-272

Wednesday, Week 6: Geology Primary Literature Seminar #1 **Reading:** *Living with Thunder* (Chapter 13 – Current movement of tectonic plates in Washington); **Watch:** [Ghost Forests](#)

Wednesday, Week 7:: Geology Primary Literature Seminar #2

Reading: *Living with Thunder* (Chapters 14 – The Future)

Weds, Week 10, 12pm – 1pm: Final seminar.

TEXTBOOKS

Regular textbooks will include "*Roadside Geology of Washington*" (RGW) and "*Living with Thunder*" by E.M. Bishop. The roadside geology is nice and informative, but you have to know what you are looking for! Bishop's book is a nice coffee-table book and it's nicely illustrated and informative.

Course Website and Methods of Communication

Please make a habit of checking the program Canvas site daily for information that might not get announced in class as well as links to assignments and additional resources: Canvas.evergreen.edu Faculty will communicate with students through "evergreen.edu" email and through Canvas (if you email faculty from a non-Evergreen email address it may end up in our junk boxes). We will do our best to respond to individual messages Mon-Fri between the hours of 9am to 5pm PM. We expect close communication with all students, and students should be aware that faculty will be trying their best to respond promptly whenever they can – though occasional delays are inevitable. While we may provide cell phone numbers for emergencies in the field, text communication is not a preferred mode of communication outside of trips.

Program Assignments and Credit

Credit in this 2-credit program is primarily attendance/participation-based. Show up for seminars and guest-speakers, do the reading, and contribute to your community. Students will have one cumulative seminar assignment on the book "Full Rip 9.0".

Expectations of an Evergreen Graduate

In addition, students are expected to make significant progress towards fulfilling the "Six Expectations of an Evergreen Graduate," listed below. You will be asked to reflect on your progress towards them in your evaluations: 1) *Articulate and assume responsibility for your own work;* 2) *Participate collaboratively and responsibly in our diverse society;* 3) *Communicate creatively and effectively;* 4) *Demonstrate integrative, independent, and critical thinking;* 5) *Apply qualitative, quantitative, and creative modes of inquiry appropriately to practical and theoretical problems across disciplines;* and 6) *As a culmination of your education, demonstrate depth, breadth and synthesis of learning and the ability to reflect on the personal and social significance of that learning.*

Field Trips

We will have one big Saturday field trip in Spring. There will be an option to conduct the trip in two-days, and the option will be discussed as a class early in the quarter.