

Community Education – Fall Quarter 2026

Course Title: Geology of Columbia River and Glacial Floods

Instructor: Prof. Kyle Dittmer

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Course Details

- Item # 44280
- Fee \$79.00
- Ridgefield/Boschma Farms facility (7000 Pioneer Street), in-person, Room #208
- Tuesday evenings, September 29th, October 6th, 13th, 6:00pm to 8:00pm

Course Description

Learn about the geologic forces that shaped the “land of fire and ice” – the scenic beauty of the Columbia River Gorge (CRG). The Pacific Northwest underwent a violent volcanic beginning only to be tamed by Ice Age glacial floods. After an overview of volcanic and glacial geology, the development of the Gorge will be explained and illustrated.

Learning Outcomes

By the end of this course, students will:

- Learn about the geology of Plate Tectonics and volcanoes (especially in the PNW)
 - Learn about the geologic history of the Gorge and the Columbia River Basalt lava flows
 - Learn about the science of Glaciers and how they can dramatically transform the landscape
 - Learn how a glacial lake dam can form and break – helping to form CRG cliffs and waterfalls
 - Learn about ways to visit the CRG to see the signs of volcanic action and glacial floods
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Course Schedule

Week 1

Overview of Plate Tectonic Theory; Volcanic Geology (rocks and landforms); Geologic History of the Columbia River Gorge.

Week 2

Overview of Glacial Geology; Geologic History of the Lake Missoula Floods in the Gorge and Vancouver/Portland. Film (2005): How A Glacial Lake Caused A Cataclysmic Megaflood.

Optional (two-hour) field trip (date TBA): Chanticleer Point (near Crown Point Vista House).



Resources

Recommended references for further study:

- https://volcanoes.usgs.gov/observatories/cvo/Historical/LewisClark/Info/summary_columbia_plateau.shtml

Class Evaluation

- Class evaluations are sent by email.
- If you don't see it right away, check your **junk/spam folder**.
- Evaluations are **anonymous** and come directly from Clark College.
- If you don't receive one, contact:
 - Email: continuingeducation@clark.edu
 - Phone: 360-992-2939

Inclement Weather

- If the college closes due to weather, updates will appear at www.clark.edu
- Community Education may also cancel classes independently if travel is unsafe.
- If canceled, you will be notified by both phone and email.
- Please check that your contact information is correct on the class roster.

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