Geology 202: Physical Geology II, Winter 2018

Instructor: Deron Carter
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Office hours: M 11:30-12 and 2:30-3, T 10-11, W 11:30-12 and 2:30-3, or by appointment
CRN: 31601
Class meeting times: Monday and Wednesday 10-11:20, Friday 10-11:50 in MH 108

Welcome to Geology!

Geology is the study of the Earth. This study encompasses the rocks and minerals that make up Earth, the processes that shape its surface, and its history. Geologists contribute to society by locating important resources, predicting geological hazards, and cleaning up the polluted environment. In this course we will explore how the surface of Earth evolves, and the hazards these surface processes pose to people. This class is not about memorizing the names of 100s of different rocks and how to distinguish them. Instead, it's about a way of looking at the world around you, and learning how to be confident in your observations and interpretations of that world.

Course Learning Outcomes

- Solve quantitative problems resulting from Earth surface processes
- Explain how Earth surface processes pose hazards to humans
- Describe landforms related Earth surface processes
- Explain geological processes that produce landforms

This course counts as a Physical Science Perspective at OSU and the Science/Math requirement for AAOT.

Learning Resources

Textbook: GEOL, by Wicander and Monroe (2nd edition, but older edition is OK!), Cengage publishing
G202 Course packet, by Deron Carter
Class moodle site: elearning.linnbenton.edu

Grading (subject to change)

Exams = 170 pts (Exams 1 and 2 @ 50 pts each, Final Exam @ 70 pts)
Labs = 70 pts
Reading Quizzes = 50 pts
Environmental justice and freshwater resources module = 40 pts
Other assignments = 15 pts
Total = 345 pts

Grading Scale

A = 100-90%
B = 89-80%
C = 79-70%
D = 69-60%
F = 59% and below

Exams: The two exams will be administered as a 2-stage "pyramid" tests. You will have a set period of time to take the exam, turn it in, then retake the exam with a group of students in the class (graded 85% for the "solo" effort and 15% for the "group" effort). Your group score cannot lower your grade. If you know you will be absent on an exam day let me know ahead of time to schedule a make up. Once exams are returned they cannot be made up.

Final Exam: This exam is comprehensive and will be completed individually; no “pyramid” format.

Lab exercises: Labs cannot be made up, but I will drop your lowest lab score. Prelabs are due at the beginning of class. We will have one field trip based lab to the Baker Creek Landslide, and you will need to wear shoes that can get muddy and have a raincoat. Some college transportation will be available and we may arrange carpools.

Reading Quizzes: Much of class will be devoted to discussion and active learning. To make this work everyone must be prepared when coming to class, so it is important that everyone read the assigned readings in the text prior to our discussion of the topic. I provide reading guides on our Moodle site to help you focus on what is important in the text. You may use your Reading Guides during the quiz and the quiz will cover just the information in the Reading Guides. You may not use your books or class notes on the quizzes. Before the quiz you are welcome to ask Deron questions about parts of the Reading Guide that you do not understand or could not find in the text. Quizzes start at the beginning of class, so if you are late you will have less time to complete it. There are no make ups, but your lowest quiz is dropped.

Environmental Justice and Freshwater Resources Module: The last two weeks of class we will focus on how geoscience is relevant to society. We will explore how water is used, contaminated, and how not everyone has fair and equal access to it. You will be evaluated through in and out of class assignments and through a take-home portion of the final exam.

Other assignments: There will be three other short assignments. This includes visiting my office during the first two weeks, and two written reflections on you exams. I will provide more details in class.

Statement of Inclusion

To promote academic excellence and learning environments that encourage multiple perspectives and the free exchange of ideas, all courses at LBCC will provide students the opportunity to interact with values, opinions, and/or beliefs different than their own in safe, positive and nurturing learning environments. LBCC is committed to producing culturally literate individuals capable of interacting, collaborating and problem-solving in an ever-changing community and diverse workforce. LBCC is an equal opportunity educator and employer.

Your responsibilities:

1. A huge amount of the learning in this course happens in real time, during class. Come ready to participate and work. Long lectures will be rare occurrences in this class, so you should be prepared to be active throughout the class.
2. If you absolutely MUST be absent, please let me know ahead of time. You may or may not be able to make up the work done in class.
3. I expect you to check the Moodle website regularly to stay updated with current class information and due dates.
4. Respect your instructors and your classmates, and we will return the favor. Respect includes creating an environment conducive to learning, which means being on time, staying for the entire class, turning off cell phones, listening, and contributing.
5. Honor Code Considerations: This class is highly collaborative; however, there are expectations for individual work as well. If it is ever unclear to you, please ask. Any cheating, plagiarism, etc., may result in a zero and possible recommendation to the administration for further consequences.
6. LBCC is committed to inclusiveness and equal access to higher education. If you have approved accommodations through the Center for Accessibility Resources (CFAR) and would like to use your accommodations in this class, please talk to your instructor as soon as possible to discuss your needs. If you believe you may need accommodation but are not yet registered with CFAR, please visit the CFAR website at www.linnbenton.edu/cfar for steps on how to apply for services or call 541-917-4789.

My responsibility:

I am here to help you learn. Only you can do the learning, but expect me to be available for help during class and office hours and to facilitate the learning process.

A FINAL NOTE: I sincerely believe that each of us can be a resource in this course. I hope you will ask questions, initiate discussion, and take an active part in the class and your learning. In this way, I think we will all learn more! ***Thanks, Deron***

COURSE SCHEDULE (subject to change):
Due dates in bold face

Week	Monday	Wednesday	Friday
1 1/8-1/12	Introductions	Earth Surface Processes Topographic maps	Lab: Topographic maps
2 1/15-1/19	*NO CLASS* *LBCC closed*	**Ch 10 Reading Quiz** Landslides	Baker Creek Landslide Field Trip
3 1/22-1/26	**Ch 12 Reading Quiz** Groundwater	Groundwater	Lab: Groundwater contamination
4 1/29-2/2	**Ch 11 Reading Quiz** Rivers	Rivers	*NO CLASS* Streamflow and Flooding take home lab
5 2/5-2/9	**EXAM**	Glaciers	Lab: Glaciers
6 2/12-2/16	**Ch 13 Reading Quiz** Glaciers	Climate change	Lab: Ice cores
7 2/19-2/23	*NO CLASS* *LBCC Closed*	**Ch 14 Reading Quiz** Deserts	Lab: Deserts
8 2/26-3/2	**Ch 15 Reading Quiz** Waves and Shorelines	Oceans	Lab: Wave tanks
9 3/5-3/9	**EXAM**	**Water footprint due** Environmental justice and the hydrologic cycle	**Reflection due** Streams and water diversion
10 3/12-3/16	**Timeline due** Hazardous waste and Love canal	**Questions due** Women and water	**USGS GW Activity due** Groundwater availability and resources
Final 3/26	**FINAL EXAM** **8:00-9:50 am** **MH 108**		