G 201: Physical Geology I (4 credits), Fall 2021

Instructor: Jeremy Randolph-Flagg Office: NA Email: randolj@linnbenton.edu Zoom Meetings: Tuesday and Thursday 8:30 am - 9:50 am CRN: 23769

# Welcome to Physical Geology!

In this course we will cover a range of geology topics that include Earth's formation, plate tectonics, natural hazards and resources, minerals and rocks, and mountain building. The class is designed to maximize your interaction with the material, engage and incorporate your own life experiences, and inspire your respect for the stewardship of the planet.

# **Course Learning Outcomes**

- Describe the process of scientific inquiry in the context of plate tectonic theory.
- Solve quantitative problems resulting from plate tectonic processes
- Classify and identify important Earth materials
- Use plate tectonic theory to explain geologic processes that occur on and below the surface of Earth

# **Expectations**

- Log into Moodle regularly.
- Attend weekly Zoom meetings
- Complete all assigned weekly readings, and view assigned videos.
- Complete all weekly assignments after carefully reading assignment instructions.
- Regularly check your LBCC student email.
- Contact the <u>Student Help Desk</u> when technical issues arise.
- Ask me questions when you have them. I'm always happy to help!
- Communicate when something isn't working for you.
- Support your fellow students.

# <u>Late Work</u>

On-time assignments are an essential element of college success. Please talk to me if you are having difficulty meeting course deadlines and we can work on a solution so that you don't get behind. I may allow a late assignment if you communicate your need for an extension in advance of the deadline.

## **Remote Teaching Schedule**

This term instead of doing in person lectures and labs the class is conducted online. <u>Tuesdays</u> will be a normal class period on Zoom. I will lecture on the topics of the week and there will be discussion and activities to reinforce the main ideas.

<u>Thursdays</u> will be lab days. I give you any info you need and then put students into breakout rooms to work on the week's lab and answer questions as needed.

## Learning Resources

- **Textbook:** <u>Physical Geology</u> (2nd edition), by Steven Earle, BC Open Textbook. The textbook is a **free**, open-educational resource, available at: <u>https://opentextbc.ca/physicalgeology2ed/</u>.
- Earth Rocks! Video Series: by Katryn Weise available at: https://www.youtube.com/playlist?list=PLrhG2NtyHAZuPW5HP3cyenGGTUqUhumeQ
- **Moodle.** This is our online class hub: you will review the syllabus, submit assignments, take quizzes and exams, and track your grade. Textbook and video links are also posted here.
- **Moodle mobile app.** This is a free app for your phone or mobile device and you will use it to take photos of some of your assignments to upload to Moodle.
- **Office Hours -** remote office hours are available on weekdays between 9am and 5pm by appointment please reach out via email and we'll work out a time.

## **Remote Instructional Methods**

For our class, you will access all course materials in your student Moodle account.

## Learning Material & Assignments

Readings, links, and assignments will be organized by week in Moodle. You can access them at any time during the week as long as you have completed the work by the deadlines.

## **Technology Requirements:**

You will need access to a computer and reliable internet. We recognize that technology may represent a barrier to some students during this period. LBCC offers several resources to students which may help you address these barriers. See LBCC's COVID-19 frequently asked questions for students. If you know your circumstances will make it difficult, please contact me as soon as possible so we can work together to find a solution.

# **Grading**

You will receive a letter grade (A-F) in this course. There is no Pass/No Pass option. Your grade will be calculated based on the following criteria:

- 1. Module Guides = 50 points (16.7%)
- 2. Assignments and Application Questions = 50 points (16.7%)
- 3. Labs (drop lowest) = 70 points (23.3%)
- 4. Weekly Quizzes = 50 points (16.7%)
- 5. Final Exam = 50 points (16.7%)
- 6. Weekly Roadchecks = 30 points (10%)

Total = 300 points

#### **Grading Scale**

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

Incomplete grade (IN) will only be considered if a student has talked to me in advance, and a signed agreement between the student and myself is completed. IN grade are assigned only if the student has a good reason for making the request, has only the minority of coursework to complete, and has scored a C or better on work that has been submitted.

<u>Exams:</u> All exams will be administered online. <u>Final Exam</u>: This exam is comprehensive, covering Weeks 1-10

**Module/Topic Guides:** Each week you will complete a worksheet based on the content covered in the readings and video lectures. Worksheets are graded on completeness and thoughtfulness of answers. They do not need to be 100% correct to receive full credit, but must be your own work. They are always due on Monday at 11:59 pm.

**Quizzes:** Quizzes generally <u>close Friday at 11:59 pm</u>. Quizzes are multiple choice, scored out of 10, and you have one attempt. Quizzes are a final assignment that touches on what you learned that week.

**Application Assignments:** Each week you will submit an answer to an application question that requires you to analyze and synthesize content from the week. More instructions are found in Moodle. These are due at 11:59 pm on Friday

**Labs:** Each Thursday we will work on a lab assignment together during our class time on Zoom. Come to class prepared to be a productive member of a group working together on

the lab assignment. Although you work together each student must submit their own work and will be graded individually. Labs are due Thursday at 11:59 pm

# Weekly Schedule:

Here is a recommended Weekly Schedule. Assignments with due dates are highlighted.

Monday	Tuesday	Wednesday	Thursday	Friday
Complete readings/ watch lecture videos Topic Guide	Attend Class	Get started on Lab	Attend Class Complete Lab	Quiz Application Assignment

# \* Unless otherwise indicated all assignments are due at 11:59 pm on due date

Dates	Week	Topics	Assignments (due dates in parentheses)
9/27 - 10/1	1.	Introduction to Geology and the Scientific Process	Topic Guide 1 (10/01) Lab 1 (9/30) Quiz 1 (10/1) Get to know you Assignment (9/28)
10/4 - 10/8	2.	Earth's Interior	Topic Guide 2 (10/4) Lab 2 (10/7) Quiz 2 (10/8) Application 1 (10/8)
10/11 - 10/15	3.	Plate tectonics	Topic Guide 3 (10/11) Lab 3 (10/14) Quiz 3 (10/15) Application 2 (10/15)
10/18 - 10/22	4.	Earthquakes and hazards	Topic Guide 4 (10/18) Lab 4 (10/21) Quiz 4 (10/22) Application 3 (10/22)
10/25 - 10/29	5.	Minerals and mineral resources	Topic Guide 5 (10/25) Lab 5 (10/28) Quiz 5 (10/29) Mineral Assignment (10/29)
11/1 - 11/5	6.	Igneous rocks and magma	Topic Guide 6 (11/1) Lab 6 (11/4) Quiz 6 (11/5) Application Question 4 (11/5)

11/8 - 11/12	7.	Volcanoes and hazards *Veterans Day 11/11 No Class	Topic Guide 7 (11/8) Quiz 7 (11/12) Volcanism in National Parks (11/12)
11/15 - 11/19	8.	Weathering and Sedimentary rocks	Topic Guide 8 (11/15) Lab 7 (11/18) Quiz 8 (11/19) Application Question 5 (11/19)
11/22 - 11/24	9.	Geologic structures and mountain building *Thanksgiving Break 11/25 & 11/26 No Class	Topic Guide 9 (11/22) Quiz 9 (11/24) Application Question 6(11/24)
11/29 - 12/3	10.	Metamorphism and metamorphic rocks	Topic Guide 10 (11/29) Lab 8 (12/2) Quiz 10 (12/3) Application Question 7 (12/3)
12/6 - 12/8		Finals Week	Final Exam

# **College Policies**

## Disability services and personal emergency arrangements:

Students who may need accommodations due to documented disabilities, who have medical information which the instructor should know, or who need special arrangements in an emergency should speak with their instructor during the first week of class. If you believe you may need accommodations but are not yet registered with the Center for Accessibility Resources (CFAR), please visit the CFAR Website for steps on how to apply for services or call 541-917-4789.

## **Basic Needs**

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Roadrunner Resource Center for support (resources@linnbenton.edu , or visit us on the web www.linnbenton.edu/RRC under Student Support for Current Students). Our office can help students get connected to resources to help. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to provide any resources that they may possess.

# LBCC Comprehensive Statement of Nondiscrimination

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information see Board Policy P1015 in our Board Policies and Administrative Rules. Title II, IX, & Section 504: Scott Rolen, CC-108, 541-917-4425; Lynne Cox, T-107B, 541-917-4806, LBCC, Albany, Oregon. To report: linnbenton-advocate.symplicity.com/public report.

# Know your rights and responsibilities

LBCC students have rights: the right to free speech, the right to assemble, the right of a free press, etc. LBCC students also have responsibilities to their community: the responsibility to participate and engage in class, the responsibility to advocate for their needs (ask for help), the responsibility to support a respectful teaching and learning environment, the responsibility to treat all persons with respect, the responsibility to be truthful and honest in all work and communications, and the responsibility to follow staff directions, local, state, and federal laws.

Rights and responsibilities balance together to create the best learning environment. For example, while you have free speech in the café or courtyard, in class the instructor decides whose turn it is to talk and what the topics for conversation will be. Students are free to believe what they believe, but instructors may require students to learn and recite concepts, principles, or theories for a class even if the student does not believe those concepts. You play a role in creating a positive community at LBCC.

Please review your rights and responsibilities (http://linnbenton.edu/go/studentrights).

If you believe a student is violating your rights, ask to be treated with respect. If that does not cure the situation, report to Associate Dean Dr. Lynne Cox, Takena Hall Rm. 107. If you believe a faculty member or LBCC employee is violating your rights, please report to Human Resources, Scott Rolen, Calapooia Center Rm. 108.

# **Changes to the Syllabus**

I reserve the right to change the contents of this syllabus due to unforeseen circumstances. You will be given notice of relevant changes in class, through a Moodle Announcement, or through LBCC e-mail.