Physical Science: Principles of Earth Science, GS 106

Syllabus

# General Information:

## Instructor Information and Availability

Instructor name: Eric McPherren

Phone number: 509-654-0806

E-mail address: mcphere@linnbenton.edu

Office hours: 9am-10:00am T Th

Office room: MH 111

Office number:

Best option to reach me is by e-mail or text. I generally respond to text messages fairly quickly. Just make sure to identify yourself and which class your message is about.

## Course Information

CRN: 41523

Scheduled time/days: 1:00-3:20PM, T Th

Number of credits: 4

Classroom: MH-108

### Prerequisites:

NONE

## Course Materials

Required:

* Textbook: Foundations of Earth Science by Lutgens and Tarbuck, 8th ver., ISBN 978-0134184814, Pearson Publishing
* GS106 Lab Manual 18/19 by Carter/LBCC
* Access to Moodle

## Course Description

## Introduces non-science majors to the Earth Sciences, including geology, meteorology, and astronomy. Includes a laboratory component. No previous science background required.

## Student Learning Outcomes

1. Identify and classify igneous, sedimentary, and metamorphic rocks.
2. Describe the formation of landforms in the context of plate tectonic theory.
3. Describe the components and processes of the hydrologic system.
4. Describe the components and processes of the atmospheric system, including weather and climate.
5. Describe objects that make up the solar system and universe, and explain the effects of the relative positions of the earth, sun, and moon.

# Class Policies

## Behavior and Expectations

You are held accountable to the [Student Code of Conduct](https://www.linnbenton.edu/current-students/administration-information/policies/students-rights-responsibilities-and-conduct), which outlines expectations pertaining to academic honesty (including cheating and plagiarism), classroom conduct, and general conduct.

### Use of cell phones: The use of cell phones during class is not acceptable unless in an emergency

## Testing

* If you know you will be absent on a test day please contact me ahead of time to schedule a make-up in the Learning and Career Center at the Benton Center.
* Once tests are returned to the class they cannot be retaken.
* I will provide you with study guides for the two exams. You will use these tools to guide your preparation for the exams.

## Grading

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Category | Lab | Class Participation | Quizzes | Midterm | Final |
| Percentage of Final Grade | 30% | 10% | 25% | 15% | 20% |

**Final Grade Calculation:**

* A = 100%-90%
* B = 89.9%-80%
* C = 79.9%-70%
* D = 69.9%-60%
* F = below 60%

**Exams:** Midterm covers weeks 1-5. Final covers weeks 6-10.

**Labs:** Each week there is a lab. You should read each lab BEFORE arriving to class. Labs will occur on Thursdays. You must bring your lab manual with you. Lab reports are due at the beginning of class on Tuesday of the following week. *Labs cannot be made up, as they require in class setups* but I will drop your lowest score. Missing more than 3 labs will cause you to fail this course.

**Weekly Quizzes:** You will complete weekly quizzes on Moodle. These are always due on Monday at 11:55 pm. Late work is not accepted but your lowest quiz score is dropped.

**Incomplete grade**s (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.*

### Late Assignment Policy

Late labs or quizzes will only be considered if reasonable circumstances apply.

# College Policies

## LBCC Email and Course Communications

You are responsible for all communications sent via Moodle and to your LBCC email account. You are required to use your LBCC provided email account for all email communications at the College. You may access your LBCC student email account through Student Email and your Moodle account through Moodle.

## Disability and Access Statement

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.

## 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.

## Title IX Reporting Policy

If you or another student are the victim of any form of sexual misconduct (including dating/domestic violence, stalking, sexual harassment), or any form of gender discrimination, LBCC can assist you. You can [report](https://linnbenton-advocate.symplicity.com/public_report/index.php/pid073717?) a violation of our sexual misconduct policy directly to our Title IX Coordinator. You may also report the issue to a faculty member, who is required to notify the Coordinator, or you may make an appointment to speak confidentially to our Advising and Career Center by calling 541-917-4780.

## Campus Police/Emergency Resources

You may review emergency services and resources at the LBCC [Public Safety website](https://www.linnbenton.edu/future-students/stuff-parents-want-to-know/public-safety). Campus Safety can be reached using the 'Code 2' button on any campus phone or by dialing x411 on campus or (541) 917-4440 off campus. Dial 911 for off campus emergencies.

# Campus Resources

## Learning Center

The Learning Center provides academic support and a comfortable place to study. It is located on the second floor above the Library.It also provides free tutoring services for all classes.

## Library

Computers and printing available

## Science Help Desk

Is located in the atrium on the first floor of Madrone Hall and is manned 20 hours per week.

# 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.

# Class Schedule

**Due dates every week:**

* **Moodle Quizzes due Monday at 11:55 pm of the Following Week.**
* **Labs due at the Beginning of Class Tuesday of the Following Week.**

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| --- | --- | --- | --- |
| Week | Reading | Tuesday (Lecture) | Thursday(Lab) |
| 1 | CH 16 | Astronomy: Stars and galaxies | Lab 10: Light |
| 2 | CH 15 | Astronomy: Solar System | Lab 9: Solar System |
| 3 | CH 11 & 13.1, 13.3-4 | Climate Change and Atmospheric Motion | Lab 7: Climate Change |
| 4 | CH 12 & 14 | Cloud formation, Thunderstorms, tornadoes, and hurricanes | Lab 8: Weather Processes |
| 5 | CH 9.1, 9.5, 9.6, 10.1, 10.2, 10.8 | The oceans: the seafloor, currents, and tides | Lab 6: Oceanography |
| 6 | CH 1.1 plus Chapter 2 | Class introduction,  Rocks and Minerals | Earth materials: rocks and minerals  Lab 1: Rock cycle |
| 7 | CH 5.3-5.6  CH 6.1-6.5 | Earthquakes and hazards | “The Big One”  Lab 2: Seismic-Eruption |
| 8 | CH 7.1-7.10, & 7.12 | Volcanoes and hazards | Lab 3: Measuring Explosivity of Eruptions |
| 9 | CH 3.3-3.10 | Rivers | Lab 4: Stream Table Experiments |
| 10 | CH 3.11-3.14 | Groundwater and caves | Lab 5: Groundwater Consulting |
| Final |  | **FINAL EXAM** |  |