

GS106 Principles of Earth Science - Winter 2018 Syllabus and Outline

Instructor:	Hollie Oakes-Miller	Email:	oakesmh@linnbenton.edu
Office Hours:	Before/after class or by arrangement.	Cell:	541-760-1666
Class website:	http://elearning.linnbenton.edu/	CRN:	31476

Lecture times and Location:

- M 12:00-1:50pm in MH-114
- WF 12:00-1:20am in MH-114

Required Materials:

- GS 106 lab manual.

Course Description: Welcome to Earth Science!! This is an introductory class and as such we will cover the fundamental principles of Earth science. Our planet is part of a dynamic system that requires Earth scientists to utilize many scientific disciplines to understand Earth processes. Along with learning the basics of earth science we will discuss how earth studies relate to the “real world” and other sciences. We will also examine ways that humans affect the Earth system. This class is designed to give non-science majors a broad background in Earth science. This class counts towards the AS and AAOT physical science laboratory requirement, is appropriate for students with little to no background in science, or are just curious about how the natural world works.

Course Goals:

- To better understand the natural world. The knowledge you build in this course will encourage you to become more curious about how the Earth works.
- To have a general knowledge of science so you can make more informed decisions as a contributing member to society.
- To develop and improve life-long skills such as problem solving, critical thinking, oral communication, and group work. I hope that the skills you learn and refine in this class will carry over into your other classes and other parts of your life.

Course Outcomes - Upon completion of the course with a "C" or better, the student should be able to:

1. Describe key events in the history of science, with particular emphasis on Earth Science, and their impact on society.
2. Describe and apply the process of scientific inquiry.
3. Solve scientific problems with quantitative methods.
4. Identify the various Earth systems and define their physical, chemical, and/or geological make up.
5. Describe how matter and energy cycle through Earth systems.

Prerequisite: There are no official prerequisites for this class. However, college-level reading and writing are strongly recommended for success.

Grading: Your grade in this course will be weighted as follows:

Worksheets, Activities, & APE:	25%
Quizzes:	25%
Labs	25%
Comprehensive Final Exam:	<u>25%</u>
Total	100%

Grade distribution: A (90-100%), B (80-89%), C (70-79%), D (60-69%), F (<59%).

Other possible grades: An **incomplete grade (IN)** will only be considered if a student has extraordinary circumstances, which require making the request, and all parties have signed a contract detailing how the work is to be completed and when it is to be completed by. I will only consider an IN grade if the student has a minority of coursework to complete and has scored a C or better on work that has been submitted.

Preparatory Worksheets: Since we will spend a great portion of our lecture hours investigating traditional “homework” questions, you will be required to read and view other lecture related material outside of class. A worksheet will be posted to prepare you for a given lecture day and ***must be partially completed at the start of class on the due date to receive credit.*** Worksheet due dates are listed in the schedule on page four.

APE: Attendance, Participation, and Enthusiasm are required along with your other responsibilities outlined in this syllabus. This part of your grade will include any ***In-Class Activities*** and will be worth 10 points per ***lecture*** hour. ***You must be present for the full class period to be eligible receive all points for a given lecture day.***

Quizzes: There will be group quizzes given in class throughout the term and will be on the topics we have covered previously with worksheets, discussion questions, activities, and/or labs. ***Quizzes cannot be made up without prior arrangement. If you are late for a quiz, you will not be granted extra time to complete it, nor can you take it with a group.***

Labs: Most weeks we will have hands-on lab activities. ***Labs generally cannot be made up;*** however I will drop your lowest lab grade. If you complete ***all*** of the labs, then I will count your lowest lab as extra credit. ***Since this is a lab-based class, you cannot miss more than 3 labs and pass this class.***

Exam: There is a comprehensive final exam. If you have a conflict with the exam date you need to arrange an alternate day/time with me ***at least 1 week prior*** to the exam. Otherwise ***there will be NO MAKE-UPS for exams. If you are late for an exam you will not be given extended time to complete it (i.e. it must be completed in the allowed time).***

Your responsibilities:

- You are expected to ***study and learn some material outside of class.*** To be successful in this class an average student should budget 6-8 hours every week to prepare for class and study for quizzes and exams.
- All preparatory materials will be posted on the class website as will any other important class related materials and links. I will also post “news” items to inform students of important information. I expect you ***to check the Moodle website regularly*** to stay updated with current class information and due dates.
- A huge amount of the learning in this course happens in real time, during class. ***Come to class everyday prepared and ready to participate.***
- 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. ***You alone are responsible for any content you miss due to an absence.***
- ***Respect*** your instructors and your classmates, and we will reciprocate. Respect includes; creating an environment conducive to learning, which means being on time, staying for the entire class, silencing cell phones, not distracting those around you (surfing Facebook etc.), listening to, and contributing to the days discussion.
- Neatness counts!! ***If I cannot read it, it’s wrong.***
- ***Honor Code Considerations:*** This class is highly collaborative; however, there are expectations for individual work as well. Any cheating, plagiarism, etc., may result in a zero on the assignment, F in the class, and/or possible recommendation to the administration for further consequences.
 - ***Working as a Group vs. Copying & Cheating?*** Be sure all group members are contributing to the completion of each assigned task. For example, it is not acceptable to complete different portions of the lab and then copy each other’s answers. That is considered ***cheating.*** Be sure you are completing answers ***in your own words.***
 - ***Plagiarism?*** For example, it is not acceptable to give verbatim book explanations and/or definitions on a quiz or exam. That is ***plagiarism!*** ***Always use your own words.***

My responsibility: I am here to help you learn. Only you can do the learning. You can expect me to be available for help before, during, and after class to facilitate the learning process.

Request for Special Needs or Accommodations

Direct questions about or requests for special needs or accommodations to the LBCC Disability Coordinator, RCH-105, 6500 Pacific Blvd. SW, Albany, Oregon 97321, Phone 541-917-4789 or via Oregon Telecommunications Relay TTD at 1-800-735-2900 or 1-800-735-1232. Make sign language interpreting or real-time transcribing requests 2-4 weeks in advance. Make all other requests at least 72 hours prior to the event. LBCC will make every effort to honor requests. LBCC is an equal opportunity educator and employer.

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.symplcity.com/public_report

Discrimination/Harassment Complaints

If you feel you have been discriminated against in any interaction at LBCC or have been harassed by a person while at LBCC or wish to report any concern or complaint, please use this form: [Report Concerns / Complaints Form](#)

Any complaint about a student or a student complaint about the College:

Contact: Lynne Cox, (541) 917-4806, coxly@linnbenton.edu, T-107B, Albany, OR 97321

Any complaint about an LBCC staff member:

Contact: Scott Rolen, (541) 917-4425, rolens@linnbenton.edu, CC-108, Albany, OR 97321

Tentative Schedule (subject to change):

Week 1	M- Jan 8 Course Introduction Syllabus Quiz Introduction to Science & Earth Science	W- Jan 10 WS #1 Due Atoms & Elements Elements & the Periodic Table Activity The Formation of the Solar System and Earth	F- Jan 12 Earth's Interior The Earth System Earth the Biography: Volcanoes Activity
Week 2	Jan 15 No Class - Holiday	Jan 17 WS #2 Due WS #1 Quiz Plate Tectonics	Jan 19 Plate Tectonics Plate Boundaries Plate Tectonics Google Earth Activity
Week 3	Jan 22 Lab: Measuring & Scaling	Jan 24 WS #3 Due WS #2 Quiz Earthquakes & Tsunamis	Jan 26 Earthquakes & Tsunamis Unprepared Activity
Week 4	Jan 29 Lab: Plate Boundaries	Jan 31 WS #4 Due WS #3 Quiz Minerals Rocks & The Rock Cycle	Feb 2 Igneous Rocks, Magma, Volcanism, and Volcanoes Crystallization Activity 1
Week 5	Feb 5 Lab: Minerals	Feb 7 WS #5 Due WS #4 Quiz Sedimentary Processes & Sedimentary Rocks	Feb 9 Metamorphism & Metamorphic Rocks Crystallization Activity 2
Week 6	Feb 12 Lab: Rock Types	Feb 14 WS #6 Due WS #5 Quiz Events in Geologic Time	Feb 16 Dating Methods Geologic Time Activity Lab: Radioactivity and Geochronology (at home)
Week 7	Feb 19 No Class - Holiday	Feb 21 WS #7 Due WS #6 Quiz The Hydrologic Cycle	Feb 23 The Hydrologic Cycle & Surface Processes Surface Processes Activity
Week 8	Feb 26 Topographic Maps Lab: Topographic Maps	Feb 28 WS #8 Due WS #7 Quiz Oceans & Ocean Basins	Mar 2 Waves Energy Balance Atmospheric Circulation Ocean Circulation Group Research Activity
Week 9	Mar 5 Lab: Oceans	Mar 7 WS #9 Due The Atmosphere & The Greenhouse Effect Atmosphere Activity	Mar 9 WS #8 Quiz Weather & Climate
Week 10	Mar 12 Lab: Atmosphere and Climate	Mar 14 Climate Change Group Presentations	Mar 16 Climate Change Group Presentations
Final Exam	Wednesday March 21, 2017, 1:00-2:50pm in MH114.		