PHYSICAL SCIENCE: PRINCIPLES OF EARTH SCIENCE, GS106, CRN 41474

Course Syllabus

General Information

Instructor Information and Availability

Instructor name: Sean Daniels
Phone number: 541-224-4147
E-mail address: daniels@linnbenton.edu, Response within 12 hours during weekdays unless there is a technical issue
Office hours: (T, W, and Th from 3-6pm) at the Learning and Career Center at the Benton Center, Corvallis, Oregon. (By Appointment, *email me* and we can set up a time to have a Zoom meeting, alternatively you can schedule an appointment by signing up here to book time using my Google scheduler tool)
Office number: Remote or by appointment at Benton Center, Corvallis, Oregon.

Course Information

Course name: Principles of Earth Science
Section number:GS106
CRN:41474
Scheduled time/days: None
Number of credits:4
Classroom(s):Online

Prerequisites:
None

Course Materials

Required:

- Textbook: Principles of Earth Science by Solada and Daniels is free to download or view at: https://openoregon.pressbooks.pub/earthscience/
- Access to Moodle, Excel/Google Sheets, Internet/Moodle, Google Earth Pro (free to download), internet access to River Runner, internet access to IRIS Earthquake Browser
- Lab, Worksheet, and Application Question documents are available in Google Doc or PDF format in lab folders each week of the course.

Course-Specific Requirements

None

Course Description

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

Student Learning Outcomes

Understanding whether or not you meet the learning outcomes in this course is by far the most important thing that you can do. To do this, I recommend learning the material as if you were going to teach it to your peers rather than attempting to get a high grade. This approach has been quantitatively proven to improve student scores in a substantial manner. See the "Resources" section at the top of the Moodle course shell to see strategies that will help you improve your overall course grades using metacognition strategies!

- Describe objects that make up the solar system and universe, and explain the effects of the relative positions of the earth, sun, and moon.
- Identify and classify igneous, sedimentary, and metamorphic rocks and minerals
- Describe the formation of landforms in the context of plate tectonic theory.
- Describe the components and processes of river and other hydrological systems
- Describe the components and processes of the atmospheric system, including weather and climate.

Learning Assessments

Grading: Each week there are three written assignments, and one quiz that correspond to each week. Google Drive links in each folder will take you to these assignments and offer you either a PDF or Google Doc option for format. After the first three weeks, there will be an exam. After six weeks there will be another exam. The third exam will occur during Finals Week. See the following information regarding learning assessment details in this course and please fill out the form

Unit exams (3 @ 75 pts) = **225 pts**. Exams will be based off the material covered in labs, videos, or the OER textbook.

Exam 1 covers modules 1-3. Exam opens in Week 4 and closes Friday of Week 4.

Exam 2 covers modules 4-6. Exam opens in Week 7 and closes Friday of Week 7

Exam 3 covers modules 7-10. This exam will be available starting week 10 and ending on Thursday of finals week.

Be sure that you can answer topics that fall under the learning objectives for each module/week's material.

Knowing the "key terms" list (which is found under "Resources" at the top of the Moodle course shell) and the processes that relate to them which we cover in labs will help you to answer related questions. There is also a link to old exams in the Resources area which may help you prepare for exams.

Cam Scanner

Cam Scanner is a popular application that can be used with any smartphone. This application allows you to take multiple pictures one after another and turn it into a single PDF file.

Please make sure your digital work submissions are in sequential order with page numbers included and that your answers are legible.

Please include the material from the original document, and verify that it is complete (some questions have multiple parts), and digitally readable–look at your PDF before submitting please.

Worksheets = 100 points. Due Sundays at 11:59 PM. There are no wrong answers for these worksheets but you can only get full credit by completing all of the questions.

Weekly Moodle Quizzes = 100 points. Due Sundays at 11:59PM. Provide basic assessment of learning from OER digital text or videos in Moodle. Two attempts are allowed.

Labs = 200 points. **Due Sundays at 11:59 PM**. This is a 4 credit lab course. You can't pass the course by missing more than 3 labs. There is a lab rubric that you can view to see how each question is graded. Each week there is a lab. All of the labs can be downloaded directly from the lab folders on Moodle each week. **Labs will be turned in on Moodle**. (See Cam Scanner text below). There is a folder on Moodle each week to turn in/upload each week's lab to. You will need to scan your completed lab work and save it as a PDF file. All labs must be turned in by you individually for grading on Moodle.

Application Questions: 100 points. Due Sunday by 11:59 PM. Learning checks to see how completely you are able to apply what you have learned in reading, videos, and labs. These forms consist of summary questions on each topic that allows you to apply what you learned about the topic to situations. Answers will be considered based on how well you are able to make connections from the material of a topic to the question/situation. You will be graded on these and you will be given a chance to re-submit the forms for a higher score up to one week after the initial due date. The form will detail what your grade means and you can consider how

you can improve your answer/comprehension and resubmit them for a higher score.

Class Policies

Behavior and Expectations

You are held accountable to the Student Code of Conduct, which outlines expectations pertaining to academic honesty (including cheating and plagiarism), classroom conduct, and general conduct.

Do either read the free digital OER textbook for this course, or two watch the videos that are provided on subjects each week in Moodle prior to beginning the work each week.

Do read the learning objectives for each week

Do use the "lab rubric" document to check your work while completing labs.

Do try to complete your work a bit at a time each week instead of at the last minute

Do have handy and examine the Key Terms by Week/Topic document in the "Resources" section of Moodle for this course.

Do employ the link to past exams to help you prepare for the ones you may take in this course.

Do read the feedback that I provide to you on your work in Moodle so you can clear up any confusion that you may have on a topic.

Do let me know if you have any questions by email

Do let me know if there is anything amiss with Moodle or an assignment that I might need to address or clarify.

In return, I promise to do the following:

- Grade your work on a reasonable timeline
- Be considerate, respectful, and fair with your answers.
- Be flexible within reason if mitigating circumstances arise.
- Provide feedback that is objective and helps you to learn where to succeed.

Guidelines for communication
You can communicate with me by e-mail, text, or visit me at the Benton Center Career and Learning Center in Corvallis Tuesday-Thursday between the hours of 3 pm and 6 pm.

Use of cell phones
Not applicable

Attendance/Tardiness Policy

Not applicable

Grading

Assessment breakdown, including Assignments, Point Values, Percentage of Total Grade - Example: 25% Quizzes, 75% Papers

- How final grade is calculated (e.g. 75% = C)
- Exams = 225 points 31%
- Worksheets = 100 points 14%
- Weekly Quizzes= 100 points 14%
- Labs = 200 points 28%
- Application Questions: 100 points 14%
- Total Points: 725 points

Final Grade Calculation:

- A = 90-100% Excellent Work
- B = 80-89% Good Work
- C = 70-79% Average Work
- D = 60-69% Poor Work
- F = 0-59% Failing Work

Late Assignment Policy

Late assignments are not accepted without prior communication and agreements with me. **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 remaining to complete, and has scored a C or better on work that has been submitted. The student takes 100% responsibility for completing any remaining coursework BEFORE the end of the following term as well as communicating this to me but submitting all work by that time. Failure to do so will cause the IN grade to change to an "F" grade.

Course Withdrawal: If you need to withdraw from the course, you may do so at any time before the withdrawal deadline for the term. International students should work with their advisers to ensure that they do no not drop below required course loads for student visa requirements prior to withdrawing.

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

Use one of the four disability and access statements on your syllabus without altering the statement of choice.

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 from 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.

Equal Opportunity and Non-Discrimination Policy

Academic Integrity Syllabus Language – Sample (Recommended)

Academic integrity is the principle of engaging in scholarly activity with honesty and fairness, and participating ethically in the pursuit of learning. Academic integrity is expected of all learners at LBCC. Behavior that violates academic integrity policies at LBCC includes cheating, plagiarism, unauthorized assistance or supporting others in engaging in academic dishonesty, knowingly furnishing false information, or changing or misusing college documents, among others. LBCC students are responsible for understanding and abiding by the College's academic integrity policy.

Academic Integrity Syllabus Language Components:
1. You and your peers paid course fees to learn material that will be presented in this course. Students do not learn by simply copying text from websites and pasting that text as part of a submission whether that is an exam, lab, or worksheet. Use your own words to answer questions. You only learn material by thinking about it and applying it.

2. You are free to answer questions on exams with information from your textbook or the lecture material but please state your source if you do this. Again, it's much better to think about what you read and record that instead of just paraphrasing the exact text of what you read. I'm not grading you on grammar! If you can describe something using your own unique way of describing it and it makes sense, I will give you credit.
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3. Academic integrity means that your work is your own. Behavior that violates academic integrity policies at LBCC includes cheating, **plagiarism** (Miriam Webster defines plagiarism as: "to steal and pass off (the ideas or words of another) as one's own : use (another's production) without crediting the source), unauthorized assistance or supporting others in engaging in

academic dishonesty, knowingly furnishing false information, or changing or misusing college documents, among others. LBCC students are responsible for understanding and abiding by the College's academic integrity policy. You can find the Student Code of Conduct here. LBCC students are responsible for understanding and abiding by the College's academic integrity policy.

If you don't understand what any of the above means in detail, please contact me by email at daniels@linnbenton.edu and we can have a candid discussion about these topics.

4. You can use outside sources for answers to questions on worksheets, and application questions but you must cite legitimate sources (.edu, .gov) only. websites or academic papers with first author last name and year of publication.

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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 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.

Public Safety/Emergency Resources:

In an emergency, call 911. Also, call LBCC Public Safety and Loss Prevention Office at 541-926-6855 and 541-917-4440.

From any LBCC phone, you may alternatively dial extension 411 or 4440. LBCC has a public safety app available for free. We encourage people to download it to their cell phones. Public Safety also is the home for LBCC's Lost & Found. They provide escorts for safety when needed. Visit them to learn more.

Campus Resources

Student Resource Guide:

The link below will take you to all of the resources that LBCC has available to you as a student. There are quite a few! Please have a look: **https://docs.google.com/document/d/1cgNhy-Rd35zVZf9J_1gwH-8__XgUjmgVRXZRMVux-oM/edit**

Students can request up to 30 pages of scanned materials in our collection (including reserves) through this form.

Students can find information about requesting the loan of a laptop or internet hot spot in the

"Access to Library Laptops and Internet Hotspots" box on this page.

Roadrunner Resource Center

Do you need help with financial resources to stay in school or technology and course materials you need to participate in your classes but cannot afford right now?

The Roadrunner Resource Center is available to help remove barriers that might prevent students from staying in school and reaching their dreams.

If you can't afford the technology or course materials you need for the whole term, the center can help you to obtain your own resources, technology, or devices for school.

Roadrunner Resource Center Contact Information

Email: resources@linnbenton.edu.

Online Portal: Fill out the Single Stop screener here: https://linnbentonccalbany.singlestoptechnologies.com/ Phone: **541-917-4877**

Important Dates

Last day to withdraw with a "W" 05/15/22

Last day of Spring Term: 06/10/22

Tips for Success in This Class

Some of you may have been attending classes in college for some time, while for other students, this may be your first or second term at the college. I have taught Earth Science for over four years and this course has been adapted and changed over those years to create a more accessible and inclusive atmosphere that should lead to your success in learning about the subject. Some key strategies that have led prior students to succeed in this and other courses include the following:

1. Show up. This is actually half of the entire success recipe in academia. If you show up, you are less likely to miss things. Since this is an online course, this means doing the work like taking notes on videos and reading so that you can become familiar with the material prior to attempting to complete it.

2. Be prepared. This means that you look at the material in this course before attempting to complete work so that new knowledge that is presented to you is not 100% new, you have a baseline familiarity with new terms and concepts.

3. Write down new knowledge. The simple act of writing something down helps your brain to develop new pathways that allow it to incorporate new material into your knowledge base.

4. Don't be afraid to ask your instructor to explain things that you might have missed, we are here to help you succeed. Repetition of concepts, and terms also helps your brain to grasp ideas.

5. Take advantage of office hours or scheduling Zoom meetings with your instructor. I can't tell you enough how students who took advantage of one-on-one tutoring were able to get over the knowledge/learning hump in various topics over the years.

7. Check your LBCC email on a regular basis for updates and announcements that an instructor may post during the week.

8. Make a study plan. Write down when labs, homework, and exams are due so that you can plan your work in a manner that works with your busy schedule.

9. Don't put off doing work until the last minute. Working on labs and preparing for exams a little bit each day allows you to slowly incorporate information into your learning process, whereas doing a lot of work at the last second to meet a deadline doesn't allow your brain the time it needs to absorb information.

10. Read the feedback that I give to you in Moodle on your work, you will be able to see where you had a misconception, and modify your perception accordingly so you understand a concept more completely for assessments.

11. If you have a life conflict that is holding you back, please contact me to talk about it, and how we can make a plan that might help you succeed and remove barriers to learning. There are many options available to you through the college, and I am more than happy to help you as I can, or to lead you to resources that you may not know about which are offered by the college that will help you to succeed in your learning goals while you are attending LBCC.

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.

Week	Reading/Media	Assignments	Topics and Exams	Labs
1	Chapter 1, Moodle Videos	Worksheet, Quiz, Application Questions	The Scientific Method and Topographic Maps	Lab 1 Topographic Maps and Science
2	Chapter 2, Moodle Videos	Worksheet, Quiz, Application Questions	Astronomy	Lab 2 Astronomy
3	Chapters 3-6, Moodle Videos	Worksheet, Quiz, Application Questions	Rock Types	Lab 3 Rock Types
4	Chapter 7, Moodle Videos	Worksheet, Quiz, Application Questions	***Exam 1 due Friday of Week4*** Plate Tectonics	Lab 4 Plate Tectonics
5	Chapter 8, Moodle Videos	Worksheet, Quiz, Application Questions	Volcanoes	Lab 5 Volcanoes
6	Chapter 9, Moodle Videos	Worksheet, Quiz, Application Questions	Earthquakes	Lab 6 Earthquakes
7	Chapters 10-11, Moodle Videos	Worksheet, Quiz, Application Questions	***Exam 2 due Friday of Week7*** Hydrology	Lab 7 Stream Tables
8	Chapter 15 Moodle Videos	Worksheet, Quiz, Application Questions	Weather	Lab 8 Weather
9	Chapter 16, Moodle Videos	Worksheet, Quiz, Application Questions	Climate Change	Lab 9 Climate Change
10	Chapter 17	Worksheet, Quiz, Application Questions	Humans and Earth Systems	Lab 10 Humans and Earth Systems
Finals Week			**Exam 3 due on 6/8/22**	

- ***All assignments are due at 11:59PM on Sundays***
- ***Exams are due as indicated above and are all on Moodle***