## Physical Science: Principles of Earth Science, GS 106

## <u>Syllabus</u>

## **General Information:**

## **Instructor Information and Availability**

Instructor name: Kenton Sean Daniels Phone number: 541-224-4147 E-mail address: <u>daniels@linnbenton.edu</u> or <u>danielsk504@gmail.com</u> Office hours: 1230pm-01:30pm TR (or by appointment) Office number: 541-224-4147 Best option to reach me is by e-mail or text. I generally respond to text messages fairly quickly.

## **Course Information**

CRN: 15195 Scheduled time/days: MTWR 01:30-03:50pm Number of credits: 4 Classroom: BC-207

#### **Prerequisites:**

NONE

## **Course Materials**

Required:

- Textbook: <u>Foundations of Earth Science</u> by Lutgens and Tarbuck, 8<sup>th</sup> 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. *This is an accelerated course and the pace will be fast*. You will be exposed to a large quantity of information/terms that you will be expected to understand and your understanding will be tested by online *homework, labs, and exams*. Attending every session *is crucial to achieving a passing grade in this course*. Plus you might actually learn something!

### **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 <u>Student Code of Conduct</u>, 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 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 made up.
- The final exam is comprehensive but you will be allowed a single 5" x 7" notecard for the final exam only.
- I will provide you with study guides for the two exams and a jeopardy review and final exam study guide for the final. Use these tools to guide your preparation for the exams.

## Grading

- Unit exams (2 @ 50 pts) = 100 points
- Comprehensive Final Exam = 75 points
- Labs = 90 points (drop lowest lab)
- Weekly Moodle Homework = 90 points (drop lowest).
- In-class activities = 20 points
- Attendance= 25 points: showing up for class is actually important Total = 400 points

#### Final Grade Calculation: You cannot pass this course if you miss more than 3 labs

- A = 400-360 points
- B = 359-320 points
- C = 319-280 points
- D = 279-240 points
- F = below 240 points

Exams: Exam 1 covers weeks 1-3. Exam 2 covers weeks 4-6.

**Comprehensive Final Exam:** This exam covers the entire 10 week course. Early finals can only be taken during finals week.

**Labs:** Each week there is a lab. You should read each lab BEFORE arriving to class. Labs will occur on Thursdays. <u>You must bring your lab manual with you</u>. Lab reports are due at the end of each lab. <u>Labs cannot be made up</u> but I will drop your lowest score. Missing more than 3 labs will cause you to fail this course.

**Weekly Homework:** You will complete weekly "HW" assignments **on Moodle**. These are always due on Sunday at 11:59 pm. *It is a good idea to set a recurring reminder for the due date for the HW assignments on your phone*. Your lowest score is dropped.

There are no HW assignments for rock types or minerals but lecture material will appear on Exam 1.

• The first HW(A) quiz will be based on the syllabus and will be done before the first lab. This will be a *PDF file on Moodle that you will print and turn in by the end of week 1*.

Please take notes during lectures, especially when I tell you to write something down. That is usually a tip that the subject is important and may show up on exams. Please ensure that you understand terms, and do not just memorize them. I am open to all questions if you do not understand a term, so feel free to ask at any time!!

# HW assignments 1-10 are based from reading from your book. The exam material will be based off of lecture and lab material.

- HW1A Syllabus Quiz (See above)
- HW1 is based on Tectonics
- HW2 will focus on Earthquakes.
- HW3 will be Volcanoes
- HW4 will be Drainage and Depositional Systems
- HW5 will be Hydrology
- HW6 Oceanography
- HW7 Climate Change
- HW8 Weather
- HW9 the Planets and Universe formation
- HW10 Astronomy.

**Incomplete grades** (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 <u>only the minority of coursework to complete</u>, and <u>has scored a C or better on work that has been submitted.</u>

#### Late Assignment Policy

No work can be made up after it is returned to the class. Labs cannot be made up. Late homework is not accepted. *All labs must be checked off by me before you leave*.

## **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 <u>report</u> 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 <u>Public Safety website</u>. 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 (Albany)**

## Learning Center (Albany)

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.

## **Testing Center (BC)**

Computers and printing available

## Science Help Desk (Albany)

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.

**Field Trip:** There will be an optional field trip to Mary's Peak during this course. Students who attend can get 5 extra credit points for attending, and 5 extra credit points for turning in a detailed write up on the trip and the topics covered. Date is TBD.

## **Class Schedule**

#### Due dates every week:

Weekly Moodle Homework due Sunday at 11:59 pm (set yourself a reminder)

Week	Reading	Monday/Wed. (Lectures)	Tues/Thursday (Labs)
1	CH 1.1 plus Chapter 2	Class introduction, Rocks and Minerals	Earth materials: rocks and minerals HWA (on the syllabus) Lab 1: Rock cycle
1	CH 5.3-5.6 CH 6.1-6.5	Earthquakes and hazards	"The Big One" Lab 2: Seismic-Eruption
2	CH 7.1- 7.10, & 7.12	Volcanoes and hazards (Monday)	Lab 3: Measuring Explosivity of Eruptions (Tuesday)
2	CH 3.3- 3.10	EXAM 1:Take Home-due via Moodle on 7/7/19 <u>Rivers &amp; Lab 4</u> : <u>Stream</u> <u>Table Experiments-Wed</u>	No Class Thursday, 4 <sup>th</sup> of July holiday
3	CH 3.11- 3.14	Groundwater and caves	Lab 5: Groundwater Consulting
3	CH 9.1, 9.5, 9.6, 10.1, 10.2, 10.8	The oceans: the seafloor, currents, and tides In Class Exercise 1	Lab 6: Oceanography
4	CH11	<b>EXAM 2</b> Climate Change, <u>In Class</u> Exercise 2	Lab 7: Climate Change
4	CH 12 & 14	Cloud formation, Thunderstorms, tornadoes, and hurricanes In Class Exercise 3	Lab 8: Weather Processes
5	CH 15	Astronomy: Solar System Reading 15.3-15.7, <i>In</i> <i>Class Exercise 4</i>	Lab 9: Solar System
5	CH 16	Astronomy: Stars and galaxies Reading: Chapter 16 <u>Jeopardy Final Review</u>	Lab 10: Light Final Review Gallery Session
Final		FINAL EXAM	