Spring 2021 GS 108: Oceanography 4 Credits WF 10:00 AM – 10:50 AM, Zoom online CRN 41972

Instructor name: Katharine Solada E-mail address: <u>soladak@linnbenton.edu</u> Office hours: Email me to set up Zoom appointments

COVID-19 Note:

- If you have any problems or questions, please let me know. I am extremely flexible and willing to help you in any way I can. I want ALL students to succeed in this course!
- The course will be conducted through Zoom and Moodle, but there will be options to study and work together with myself and other students online.
- All of my course materials will be posted on Moodle, and you will turn in assignments through Moodle, if you have any problems email me.

Course Description

An introductory laboratory science course. Examines the four major categories of oceanographic study: geological, physical, chemical and biological. Emphasizes the geological and geophysical aspects of the sea floor; physical and chemical properties of sea water, waves, tides, ocean circulation and currents; marine ecosystems; and ocean utilization.

Prerequisite: MTH 075 and MTH 098 (need a C or better)

Course Materials

Required:

- Access to Moodle: This is our online class hub: you will check grades, review syllabus and PowerPoints, carry on discussions with your instructor and classmates, take quizzes and submit assignments.
- The Textbook: <u>https://rwu.pressbooks.pub/webboceanography/</u> and the labs are free and located on the course Moodle shell.
- Zoom account through LBCC: Register at <u>https://linnbenton.zoom.us/</u> using your LBCC email and password.
- Access to Google Suite: (docs, slides, and sheets—available with LBCC email)

Recommended:

• Moodle app for your phone.

Student Learning Outcomes

- 1. Describe key events in the history of science, with particular emphasis on oceanography, and their impact on society
- 2. Describe and apply the process of scientific inquiry
- 3. Solve scientific problems using quantitative methods
- 4. Describe the geological characteristics of the seafloor
- 5. Explain interactions between the physical, chemical, and biological ocean systems

Grading

Grades will be posted on Moodle. Coursework will be graded as follows:

| Midterm | 20 % |
|--------------------------|------|
| Labs (lowest dropped) | 30 % |
| Quizzes (lowest dropped) | 20 % |
| Final Exam | 20 % |
| Write ups | 10 % |
| | |
| Total | 100% |

Final letter grades will be assigned as follows (I do not round grades up):

| А | = 90 - 100 % | |
|---|------------------|--|
| В | = 80 - 89.9 % | |
| С | = 70 – 79.9 % | |
| D | = 60 - 69.9 % | |
| F | F = Below 59.9 % | |

Class Organization:

The class will be organized into 10 modules. Each module is highly structured to provide opportunity to actively think and practice the topics each week. Each week's module will open Monday at 8 am and close Sunday (11:59 pm). Expect to take up to 10 hours a week to be successful in this class. There will be 2 exams, with weekly quizzes and write ups that will be completed on Moodle. Quizzes and worksheets will cover recent readings and lectures. Please note that modules are only available one week at a time. Each module consists of a lecture video, a PowerPoint, additional videos, quizzes, write ups, and a lab.

Lectures

Please watch the lecture video(s) before class on Wednesday. Class time will be dedicated to review and group work.

Midterm

This exam covers weeks 1-5.

Final Exam

This exam is comprehensive and covers the entire 10-week course. Early finals can only be taken during finals week.

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 only the minority of coursework to complete, and has scored a C or better on work that has been submitted.

Due Dates

Modules

Every week there is a module – they will only be open for that week. Modules open Monday morning (8:00 am) and close the following Sunday (11:59 pm).

Write ups

Every week you will also complete al short-answer style assignment on what we covered that week. Write-ups are **due before class Wednesday (10:00 am).**

Labs

Each week there will be a lab posted on Moodle. Labs are **due Sunday (11:59 pm)**, although you will most likely finish in class where your peers and I can assist you. Lab exercises are designed to be done collaboratively and will be hard to do on your own. Late lab reports are subject to a 10% grade reduction per day past due. After 3 days, a maximum of 50% deduction will be taken, this means labs can be turned in at any point before finals week with a maximum of 50% grade reduction. Your lowest lab score will be dropped. If you miss 3 or more labs you will fail the course.

Quizzes

There will be 10 Moodle quizzes. You will complete these assignments on Moodle. These are always **due on Sunday (11:59 pm).** Late work cannot be accepted, but your lowest quiz score will be dropped. If you believe Moodle miscalculated your grade, please contact me and I will review your assignment.

Changes to the Syllabus

I may have 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.

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. Students are most successful when they ask questions, actively participate in class, and complete assignments. The more effort that you as the student puts in the more that you will get out of this class. I hope you can leave here with the knowledge and critical thinking skills to look at the world around you a bit differently. As an instructor I am here to support you so please contact me or see me study sessions with any questions/concerns you may have.

Statement of Respect

Your instructor will make every attempt to create an environment free of distraction and one open to free discourse. The college environment is one of exploring ideas, but also in a context of mutual respect for your peers and instructors. If a pattern of disrespect develops the instructor reserves the right to discuss appropriate behavioral expectations with individuals who may not fully understand this responsibility. At no time will a hostile or condescending discussion be permitted.

Attendance

Coming to class is essential, please prearrange any absences you may have with me – I will work with you. Missing class will affect your overall grade. We only meet twice a week to go through the material and labs, this is a lab course so if you keep miss more than 3 unexcused classes you will fail the course.

Concerning cheating and plagiarism

I encourage group work and researching your answers; however, **your answers must be expressed in your own words, numbers, etc.** If I catch you copying or cheating on an assignment you will receive a zero on that assignment and a final warning. If you are caught a second time you will fail the course and possible recommendation to LBCC administration for further consequences. 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.

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

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.

<u>A FINAL NOTE</u>: I want all my students to succeed in this course. Do not hesitate to ask me or your peers questions, this class is a safe environment that encourages all learning. I hope you all enjoy this course! ©

| Dates | Week | Topics | Assignments |
|----------------|------|---|--|
| 3/19 - 4/4 | 1. | Class Introduction, Earth History, Maps, Intro to Oceans | Write-Up #1 Quiz #1 Lab 1 - Maps |
| 4/5 - 4/11 | 2. | Earth Structure, Plate Tectonics | Write-Up #2 Quiz #2 Lab 2 – Seafloor Geology |
| 4/12 - 4/18 | 3. | Seafloor Provinces, Marine Sediments, Measuring the Seafloor | Write-Up #3 Quiz #3 Lab 3 - Marine Sediments |
| 4/19 - 4/25 | 4. | Water Chemistry, Water Properties | Write - Up #4 Quiz #4 Lab 4 - Water Properties |
| 4/26 - 5/2 | 5. | Air-Sea Interaction | Write-Up #5 Quiz #5 Lab 5 - Heat Transfer |
| 5/3 - 5/9 | 6. | Ocean Circulation | Midterm Due (5/7) Write-Up #6 Quiz #6 Lab 6 - Ocean Circulation |
| 5/10 - 5/16 | 7. | Ocean Waves: Wind Driven Waves, Tsunamis, Tides | Write-Up #7 Quiz #7 Lab 7 - Tsunami |
| 5/17 - 5/23 | 8. | Marine Productivity | Write-Up #8 Quiz #8 Lab 8 - Marine Productivity |
| 5/24 - 5/30 | 9. | Marine Pollution | Write Up #9 Quiz #9 Lab 9 - Marine Pollution |
| 5/31 - 6/6 | 10. | The Oceans and Climate Change | Write Up #10 Quiz #10 Lab 10 - Ocean Acidification |
| 6/7 -6/9 | | Finals Week | Final Due (6/8) |

<u>Class Schedule</u> * Unless otherwise indicated all assignments are due by 11:59 pm on their due date