

GEOS3034: Oceanography

Fall 2021, Section 101

Lecture: M W F 9:00-9:50 AM | **Location**: BO 125

Instructor Information

Professor: Anna M. Weiss, Ph.D.

Please call me: Anna; Dr. or Professor Weiss (Pronounced like "Rice" but with a "W")

Pronouns: (she/her)

Email: anna.weiss@msutexas.edu (expect a response in 24-36 hours)

Office Location: Office hours will be held virtually on Zoom ID: 974 2271 9769

Office Hours: M, W, F 10 - 11 AM; Th 10 - 12 PM; by appointment (email me!)

Ask me about: anything related to the class, doing STEM research or outreach, graduate

school, geology or environmental science careers

I strongly encourage students to come to me with questions during office hours and/or by email. If you are having trouble with a concept or a section of the class, please see me before it becomes a bigger problem.

Course Description

An introduction to the physical, chemical, geological, and biological processes of the oceans. Integration of tectonic biologic, ecologic, and chemical processes will be stressed. Topics include bathymetry, ocean currents, hurricanes, atmospheric circulation, chemical cycles, marine biology, and the history of ocean exploration. Labs include analysis of NASA and NOAA datasets.

Course Goals

- To apply the scientific method to problem-solving in the oceanographic environment.
- To interpret charts, maps, and graphs as part of the investigative process.
- To work collaboratively to solve problems related to the ocean
- To effectively integrate the concepts from physical, chemical, biological, and geological oceanography to show how the earth works as a system.

Student responsibilities

- 1. In order to pass this course, students will be expected to develop an understanding of ancient life and important geological events.
- 2. Class participation: This course is not a passive lecture course. I will use a variety of classroom activities, student presentations and discussions to ensure students take an active role in learning. Students are expected to participate to the best of their ability. Additionally, students are expected to be respectful of one-another in their interactions in the classroom, lab and on-line.
- 3. Class preparation: The lectures, discussions, and activities for this course are designed to build on and synthesize knowledge that students glean from the assigned texts, primary literature readings, and assignments. These discussions and activities will be more meaningful when everyone shows up prepared. Students are expected to complete readings and assignments ahead of class.
- 4. Group projects: In lab and lecture, there will be assignments where you will work as a team. Please be a good team-mate, be respectful of one another, complete assigned tasks and help others when needed. Failure to work with your teammates will result in a failing grade for the project.
- 5. If you are struggling in class, please ask for help! If you cannot attend office hours, email me to make an appointment.

Instructor responsibilities

- 1. To provide an inclusive, equitable environment conducive to active learning and discussion.
- 2. To guide students in the process of scientific inquiry.
- 3. To enhance students' understanding of oceanography, the natural history of the oceans, and societal issues related to the ocean.
- 4. To assess students' knowledge through in-class questions, assignments and exams, and to provide timely feedback.

Course Materials

Required Text

• Introduction to Ocean Sciences, 4th. Ed. by Segar

Open Access textbook available as PDF on D2L. Other readings will be posted as PDFs on D2L.

Lecture

Pencil/pen

Notebook (or laptop to take notes)

All assigned reading should be done in advance of class. Bring your notes, and be prepared for discussion!

Desire-to-Learn (D2L)

All readings, assignments, etc. will be announced in class and posted on D2L. Extensive use of the MSU D2L program is a part of this course. Each student is expected to be familiar with this program as it provides a primary source of communication regarding assignments, examination materials, and general course information. You can log into D2L through the MSU Homepage. If you experience difficulties, please contact D2L directly.

Grading

Table 1: Points allocated to each assignment

Assignments	Percentage of grade
Class Participation and Discussions	5%
Homework	5%
Quizzes	10%
Exams	20%
Final Exam	20%
Lab Overall Grade	40%

Table 2: Total points for final grade.

Grade	Points
А	90 + %
В	80 to 89.9%
С	70 to 79.9%
D	60 to 69.9%
F	Less than 60%

Homework

Homework will be assigned to help reinforce concepts from class and lab and to help you study for quizzes and exams. These assignments may take anywhere from 15 minutes to an hour, and their point values will reflect the size of the assignment. Due dates are listed on the syllabus.

You will occasionally be assigned in-class assignments. In the event that these are not finished by the end of the class period, the assignment will become homework and will be due the following class. This will factor into your participation and discussion grade.

In-class quizzes

Specific questions will be discussed in class each day (for example, as "Road Checks" or "Concept Tests"). To ensure participation from students, the questions will be posted as quizzes on D2L. Completing these quizzes will account for your Class Participation and Discussions grade (up to 10 points per day). They can be completed as we go through class, up to 24 hours after.

Quizzes

A short quiz will be given at the start of class every Friday and will consist of approximately 5 questions. Quizzes may be short answer, fill-in-the-blank, diagram labeling, etc, with occasional few multiple-choice questions. The quiz should take approximately 15 minutes.

Exams

Three exams will be given through D2L during the semester. The exams will be cumulative and will generally be short and long answer, with some diagram labelling, drawing or other task. Do not expect a multiple-choice test. Exams will last the length of the class period. The exam dates are as follows:

Exam 1: Monday 9/27; Exam 2: Monday 10/25; Exam 3: Wednesday 11/22

Exam scores will be returned with the exams the week following the exam. If you feel there was an error made in the evaluation of your exam, you must bring this up within 10 days of the return of the mid-term exams or immediately in the case of the last exam. If you wish to check on your current lab, quiz, and exam points at any point during the semester, check the D2L website or come to office hours. It is preferred that you email me (or your TA) and indicate you would like to see this summary before meeting so we can have the information ready to go.

Final Exam

The final exam will be cumulative. It will take place on Monday 12/6 from 8-10 am. The exam will be a combination of short and long answer, with some diagram labelling, drawing or other problem solving. Do not expect a multiple-choice test.

Exam scores will be returned with the exams the week following the exam. If you feel there was an error made in the evaluation of your final exam, you must bring this up immediately.

Late Work

Late work will be accepted with a 5-point penalty per day it is late up to one week (7 days) past the due date. I am willing to work with students on late work, especially given extenuating circumstances but you need to contact me before the assignment is due. If you are having trouble keeping up or need extra time on an assignment, please contact me as early as possible. Again, this needs to be done in advance of the due date.

Make Up Work/Tests

I do not allow make-up work or exams without an official university excuse. If you need to miss work, quizzes or exams due to extenuating circumstances, please see me as soon as possible to discuss a new deadline. This needs to be done in advance of the due date.

Extra Credit

I do not accept individual extra credit assignments. Do not ask, the answer will be no. However, I will provide several opportunities for everyone to get extra credit throughout the semester (such as in class, on exams, as take-home assignments, for pertinent seminars) and will provide ample advanced notice of the assignments.

Instructor Class Policies

Attendance

Attendance will not be taken, however there will be daily in-class quizzes and discussions that will make up 5% of your final grade. You will be able to participate in lecture as well these quizzes and discussions virtually, so if you are not feeling well or cannot physically attend lecture for another reason, I urge you to stay home and participate virtually without fear of penalty.

Religious holy days sometimes conflict with class and examination schedules. If you must miss an examination, work assignment, or other project due to the observance of a religious holy day you will be given an opportunity to complete the work missed within a reasonable time after the absence. Please notify me at least fourteen days prior to the classes scheduled on dates you will be absent to observe a religious holy day.

Cell phones and Computers

Cell phones and computers may be used in specific contexts, such as when taking notes, but I ask you to respect myself and your fellow students and not text, use social media, email or other non-class related websites. If you are found doing this during lecture or lab, a warning will be given, then you will be asked to leave.

Food and Drink

Food and drink will not be allowed in lecture space or lab. Please refrain from eating or drinking during this period, or step outside if absolutely necessary.

Services for Students With Disabilities

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Clark Student Center, Room 168, (940) 397-4140. Current documentation of a disability will be required in order to provide appropriate services, and each request will be individually reviewed. For more details, please go to Disability Support Services.

Grade Appeal Process

Students who wish to appeal a grade should consult the Midwestern State University <u>Undergraduate</u> Catalog

Academic Misconduct Policy & Procedures

Academic Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given). Specifically,

- "a. The term "cheating" includes, but is not limited to:
 - (1) use of any unauthorized assistance in taking quizzes, tests, or examinations;
 - (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or
 - (3) the acquisition without permissions, of tests or other academic material belonging to a member of the university, faculty, or staff.
- b. The term "plagiarism" includes, but is not limited to, the use by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgement. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.
- c. The term "collusion" means collaboration with another person in preparing work offered for credit if that collaboration is not authorized by the faculty member in charge." From <u>Student Handbook 2019-</u>

I do not tolerate academic dishonesty of any kind. If you are caught cheating, colluding or plagiarizing, you will be given a zero on the assignment and a written warning. If you are caught twice, you will receive an F in my class.

Additional guidelines on procedures in these matters, including appeals, may be found in the Office of Student Conduct.

Refer to: https://msutexas.edu/student-life/_assets/files/handbook.pdf

Notice

Changes in the course syllabus, procedure, assignments, and schedule may be made at the discretion of the instructor. Modalities of instruction may change given developments in COVID-19. Instructor will inform students in writing of any changes to be made prior to making them.