

Introduction to Oceanography

OCS 1005 (section 2)

Spring 2019 – M W F 10:30 – 11:20 pm

215 Tureaud Hall

The purpose of this course is to provide you with an appreciation of the important aspects of the ocean realm. I will introduce you to marine processes in the four fields of Oceanography (geological, chemical, physical and biological) with the goal of broadening your understanding of the oceanic environment. Throughout this course, you will develop an appreciation of the methods of critical thinking and an understanding of how knowledge about the ocean is acquired and applied, as well as how the oceanic environment can affect your lives and how you, in turn, affect the ocean.

General Education Credit This course is available for General Education credit in the Natural Sciences as a Physical Science Course.

Course Learning Objectives

- 1) Demonstrate knowledge of a broad survey of the discipline, including underlying principles that govern the natural world.
- 2) Demonstrate the ability to design and test hypotheses by experimentation or other appropriate techniques.
- 3) Demonstrate and ability to use inductive and deductive reasoning to understand scientific phenomena.
- 4) Demonstrate an ability to relate the field of study to other fields in the Natural Sciences.

Instructor:

Dr. Cassandra N. Glaspie

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office hours: 11:30 – 12:30 pm Mondays, Wednesdays

Teaching Assistant:

Johnny Ryu

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office hours: 11:30 – 12:30 am Wednesdays

My scheduled office hours are 11:30 – 12:30 pm on Mondays and Wednesdays. BUT, I am more than willing to make specific appointment times to meet with you on other days! Your TA is also available to schedule meetings at other times.

Textbook: *Oceanography; An Invitation to Marine Science* (ninth edition)
Tom Garrison, Robert Ellis (Cengage Learning)

Grading:

Overview:

- 4 Exams = 90% of your grade
- Daily Quizzes = 10% of your grade (if this helps you)
- Bonus homework assignments to make up quiz grades

Exams (required)

- There will be 4 exams throughout the semester.
- Each exam is worth 100 points.
- Exam dates are noted on the syllabus.
- Exams will adhere to the schedule, though there may be some modification on the material covered on each exam depending on how much of the material we cover. Any additional material, not from the text that I present in class, will be included on the exams.

Daily Quizzes (optional):

- There will be daily in-class quizzes on the material we are currently discussing, which will make up 10% of your final grade.
- Each quiz is worth 10 points.
- You will have 1 week to dispute each quiz grade, if necessary. After 1 week, we will shred the quizzes.
- Your 5 lowest quiz grades will be dropped.
- ***Quiz grades can *only help* your grade. If the sum of your quiz grades hurts your final grade, then your final grade will be based solely on the 4 exams.

Homework (optional):

- These will be a few *optional* homework assignments.
- Each homework assignment is worth 10 points and can be used to replace a missed quiz or your lowest quiz grade.

Makeup Policy:

- There are no makeups for daily quizzes for any reason.
- There are no makeups for homework for any reason. You may turn in the homework early or via email prior to the time at which the homework is due.
- Makeup exams are available to students who have legitimate medical excuses or other reasons (travel for student organizations, require court appearances including jury duty, etc).
 - o In order to be considered for a makeup exam you **must** contact the instructor by email or in person 24 hours in advance of the exam with documentation for proof of a valid reason for the absence.
 - o Weddings, family reunions, vacations, car repairs, etc. are not valid reasons for a make-up exam. **However**, you can take any exam early without any penalty if you let me know at least 1 week prior to the exam.

Cheating and Plagiarism Policy:

Cheating or plagiarism will not be tolerated. It is recommended that students review the *LSU Student Handbook* and *Code of Conduct*. These documents can be found on the Dean of Students webpage. Students suspected of cheating or plagiarism will be referred to the Dean of Students as per requirements in the *LSU Student Handbook*.

Students who violate the LSU Code of Student Conduct (<https://saa.lsu.edu/code>) will be referred to Student Advocacy and Accountability. Academic misconduct at LSU includes but is not limited to, cheating, plagiarism, collusion, falsifying academic records, and any act designed to give an unfair academic advantage to the student. The outcome will range from failing the assignment to failing the class. Suspension from LSU is the common outcome for multiple academic violations.

Grading Scale:

- Midterm grades will be calculated based on the first 2 exams.
- Final grades will be rounded to the nearest whole number.
- Letter grades will be defined as follows:

97-100	A+	70 to <73	C-
93 to <97	A	67 to <70	D+
90 to <93	A-	63 to <67	D
87 to <90	B+	60 to <63	D-
83 to <87	B	0 to <60	F
80 to <83	B-		
77 to <80	C+		
73 to <77	C		

Additional Information:

Lecture notes:

- Lecture notes will be posted on Moodle at least one day before the lecture starting at the second lecture.

Grade posting:

- Quiz questions, answers and grades will be posted to Moodle after class (within 24 hours) by the TA. These quiz questions cover important topics so be sure you understand the questions and answers, even if you missed class that day.
- Exam grades will be posted to Moodle within 48 hours.

Review for exams:

- A study guide for topics covered by the exam will be available on Moodle 1 week prior to each exam.
- In-class review for exams will occur within the class period on the date immediately preceding the exam. Students are encouraged to ask questions on the material to help prepare them for the exam.
- Your TA will also schedule a review session on the day prior to the exam. If you are unable to attend the review session, make use of the office hours for the TA and instructor.
- The instructor will be available to answer any questions over email the night before the exam until midnight.

Class Rules:

- Please turn off cell phones at the beginning of class or set to vibrate.
- Because of the large class size there is often excessive talking amongst students while the professor is lecturing, leading to complaints from other students. I expect everyone in class to respect everyone else. Excessive talking in class during the lecture will result in loss of all Bonus points/opportunities for the semester. Continued violations will result in ejection from the class.
- If you come in late or need to leave early, please sit close to the door in order to minimize disturbance to the class.

Disability Services:

Louisiana State University is committed to providing reasonable accommodations for all persons with disabilities. If you have a disability for which you may require accommodations you are required to register with Disability Services (115 Johnston Hall; (225)578-5919). Students that receive accommodation letters, please meet with me to discuss the provisions of those accommodations as soon as possible.

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Class Schedule

Subject to change. Please see Moodle for most updated class schedule.

Lecture	Date	Topic	Chapter
1	9-Jan	Introduction	
2	11-Jan	History of Oceanography	2
3	14-Jan	Origin of Earth and Ocean	1
4	16-Jan	Earth Structure and Plate Tectonics	3
5	18-Jan	Earth Structure and Plate Tectonics	3
	21-Jan	Martin Luther King Day- No Classes	-
6	23-Jan	Ocean Basins	4
7	25-Jan	Ocean Basins; Sediments	4,5
8	28-Jan	Sediments	5
-	30-Jan	Review for Exam	-
-	1-Feb	Exam 1 - Geological	1,2,3,4,5
9	4-Feb	Properties of Water	6
10	6-Feb	Density and Stratification	6
11	8-Feb	Light and Sound	6
12	11-Feb	Ocean Chemistry	7
13	13-Feb	Dissolved Gases	7
14	15-Feb	Nutrients	7
15	18-Feb	Acid-Base Balance	7
-	20-Feb	Review for Exam	-
-	22-Feb	Exam 2 - Chemical	6, 7
16	25-Feb	Circulation of the Atmosphere	8
17	27-Feb	Surface Currents	9
18	1-Mar	Thermohaline Circulation	9
-	4-Mar	Mardi Gras- No Classes	-
-	6-Mar	Class Cancelled	-
19	8-Mar	Waves	10
20	11-Mar	Storms	10
21	13-Mar	Tides	11
22	15-Mar	Coasts	12
23	18-Mar	Estuaries	12
-	20-Mar	Review for Exam	-
-	22-Mar	Exam 3 - Physical	8,9,10,11,12
24	22-Mar	Evolution and Extinction	13
25	25-Mar	Carbon and Nitrogen Cycles	13
26	27-Mar	Role of Environment	13
27	29-Mar	Primary Producers	14

Lecture	Date	Topic	Chapter
28	1-Apr	Marine Invertebrates	15
29	3-Apr	Fishes, Mammals & Birds	15
30	5-Apr	Marine Communities	16
31	8-Apr	Predator-Prey Interactions	16
32	10-Apr	Marine Resources	17
33	12-Apr	Fisheries	17
-	15-Apr	Spring Break- No Classes	-
-	17-Apr	Spring Break- No Classes	-
-	19-Apr	Spring Break- No Classes	-
-	22-Apr	Class Cancelled	-
34	24-Apr	The Ocean & the Environment	18
-	26-Apr	Review for Exam	-
TBA	Final	Exam 4 - Biological	13,14,15,16,17,18