

SIO 3: Life in the Oceans

Winter Quarter 2019

Course Instructor:

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Course Structure: Three lectures per week on Monday, Wednesday and Friday at 2:00- 2:50

Location:

Discussion Section:

Course Description: This course will introduce you to a wide variety of organisms that live in the oceans, the habitats they occupy, and how species interact with each other and their environment. Included will be examinations of adaptations, behavior, ecology, and a discussion of local and global resource management and conservation issues. Lectures will be supported by discussion sections, in order to review course information and/or participate in activities such as watching movies.

Textbook: *Marine Biology* (9th edition), P. Castro & M.E. Huber, McGraw-Hill.

Additional course readings will be assigned in class and will be available as pdf's on Ted

Grading:

Two midterm exams (multiple choice, matching and short answer format)		
Participation/attendance	=	20 points (5%)
1st Midterm	=	100 points (25%)
2nd Midterm	=	100 points (25%)
Discussion Sessions	=	100 points (25%)
Final exam (multiple choice, matching and short answer)	=	80 points (20%)
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Total	=	400 points

Discussion Sections: are mandatory and are primarily for review of material and readings about news in marine conservation, and the clarification of lectures for exams. Also, there will be some movies that we will watch as a part of the topics reviewed during the course.

SIO 3 Lecture/Exam Schedule (Winter 2019)

<u>Date</u>	<u>Lecture Topic</u>	<u>Text Reading</u>
1) Jan 7	Science of Marine Biology; History of Ocean Exploration	Chapter 1
2) Jan 9	Introduction; Fundamentals of Biology	Chapter 4
3) Jan 11	Microbes	Chapter 5
4) Jan 14	Seaweeds and Plants	Chapter 6
5) Jan 16	Marine Invertebrates I	Chapter 7
6) Jan 18	Marine Invertebrates II	Chapter 7
Jan 21	Martin Luther King, Jr. Holiday	
7) Jan 23	Marine Fishes	Chapter 8
8) Jan 25	Marine Birds & Reptiles	Chapter 9
9) Jan 28	Marine Mammals I	
10) Jan 30	Marine Mammals II	
11) Feb 1	Movie (Oceans)	
Feb 4	Midterm: Lectures 1-11	
12) Feb 6	Physical Oceanography	
13) Feb 8	Introduction to Marine Ecology	
14) Feb 11	Guest Lecture (Matt Costa - Mangroves)	
15) Feb 13	Guest Lecture (Josh Stewart - MegaFauna)	
16) Feb 15	Guest Lecture (Smart Fin)	
Feb 18	Presidents' Day Holiday	
17) Feb 20	Intertidal Communities	Chapter 11
18) Feb 22	Coral Reefs I	Chapters 14
19) Feb 25	Guest Lecture (Dr. Brian Zgliczynski)	
20) Feb 27	Movie (The Great Barrier Reef)	
21) Mar 1	Estuaries, Kelp Forests	Chapters 12

22) Mar 4 Epipelagic

Chapter 15

Mar 6 Midterm: Lectures 12-22

23) Mar 8 Deep Ocean

Chapters 16

24) Mar 11 Resources from the Oceans and Overfishing

Chapter 17

25) Mar 13 Impacts of Humans

Chapter 18

26) Mar 15 Climate Change and Ocean Acidification

Chapter 10 (p. 231-243)

Mar XX Final Exam (Lectures 23-26)