

SIO 3: Life in the Oceans

Winter Quarter 2020

Course Instructor:

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Course Structure: Three lectures per week on Monday, Wednesday and Friday at 1:00- 1:50

Location: Upper Campus, Warren Lecture Hall 2204

Discussion Section: Warren Lecture Hall 2206, Wednesday 2:00- 2:50 or 3:00- 3:50

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 6	Science of Marine Biology; History of Ocean Exploration	Chapter 1
2) Jan 8	Introduction; Fundamentals of Biology	Chapter 4
3) Jan 10	Microbes	Chapter 5
4) Jan 13	Seaweeds and Plants	Chapter 6
5) Jan 15	Marine Invertebrates I	Chapter 7
6) Jan 17	Marine Invertebrates II	Chapter 7
Jan 20	Martin Luther King, Jr. Holiday	
7) Jan 22	Marine Fishes	Chapter 8
8) Jan 24	Marine Birds & Reptiles	Chapter 9
9) Jan 27	Marine Mammals I	
10) Jan 29	Marine Mammals II	
11) Jan 31	Guest Lecture (Matthew Costa)	
Feb 3	Midterm: Lectures 1-11	
12) Feb 5	Movie on Climate System (TBA)	
13) Feb 7	Physical Oceanography	
14) Feb 10	Introduction to Marine Ecology	
15) Feb 12	Intertidal Communities	Chapter 11
16) Feb 14	Estuaries, Kelp Forests	
Feb 17	Presidents' Day Holiday	
17) Feb 19	Coral Reefs	Chapters 14
18) Feb 21	Movie (Coastal Seas)	
19) Feb 24	Deep Ocean	Chapters 16
20) Feb 26	Polar Ecosystems	
21) Feb 28	Epipelagic	

22) Mar 2 Movie (The High Seas)

Mar 4 Midterm: Lectures 12-22

23) Mar 6 Resources from the Oceans

Chapters 17

24) Mar 9 Impacts of Humans

Chapter 18

25) Mar 11 Climate Change and Ocean Acidification

Chapter 10

26) Mar 13 Solutions

Mar 20 Final Exam (Lectures 23-26)