

SIO 3: Life in the Oceans

Winter Quarter 2024

Course Instructor:

Dr. Octavio Aburto-Oropeza, Scripps Institution of Oceanography
Phone: 858-534-1043
Email: maburto@ucsd.edu
Office hours: by appointment (preferably set up via email)

Teaching Assistant(s):

Sonya Timko, Scripps Institution of Oceanography
Email: setimko@ucsd.edu
Office hours: by appointment

Hadley Clark, Scripps Institution of Oceanography
Email: hgclark@ucsd.edu
Office hours: by appointment

Aburto Lab Academic Assistant:

Alberto Rivera, Scripps Institution of Oceanography
Email: alr052@ucsd.edu
Office hours: by appointment

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

Location: Upper Campus, **Mandeville Center B-202**

Discussion Section: Wednesday 10:00- 10:50 or 11:00- 11:50am

Location: Upper Campus, Warren Lecture Hall and Pepper Canyon Hall

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* (12th edition), P. Castro & M.E. Huber, McGraw-Hill.

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

Grading:

Two midterm exams (multiple choice, matching and short answer format)

Participation/attendance = 5%

1st Midterm = 25%

2nd Midterm = 25%

Discussion Sessions = 25%

Final exam (multiple choice, matching and short answer) = 20%

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 2023)

Date	Lecture Topic	Modality
1) Jan 8	Introduction and History of Ocean Exploration	On-Campus
2) Jan 10	What is and How to Become a Marine Biologist	On-Campus
3) Jan 12	Movie	On-Campus
Jan 15	Martin Luther King, Jr. Holiday	
4) Jan 17	Fundamentals of Biology and microbes	On-Campus
5) Jan 19	Seaweeds and Plants	On-Campus
6) Jan 22	Marine Invertebrates I	On-Campus
7) Jan 24	Marine Invertebrates II	On-Campus
8) Jan 26	Marine Fishes	On-Campus
9) Jan 29	Marine Birds & Reptiles	On-Campus
10) Jan 31	Marine Mammals I	On-Campus
11) Feb 2	Marine Mammals II	On-Campus
Feb 5	Midterm: Lectures 1-11	On-Campus
12) Feb 7	Physical Oceanography	On-Campus
13) Feb 9	Introduction to Marine Ecology	On-Campus
14) Feb 12	Movie	On-Campus
15) Feb 14	Intertidal Communities	On-Campus
16) Feb 16	Estuaries, Kelp Forests	On-Campus
Feb 19	Presidents' Day Holiday	
17) Feb 21	Coral Reefs	On-Campus
18) Feb 23	Polar Seas	On-Campus
19) Feb 26	Deep Ocean	On-Campus
20) Feb 28	Epipelagic	On-Campus
21) Mar 1	Movie	On-Campus

Mar 4	Midterm: Lectures 12-21	On-Campus
22) Mar 6	Resources from the Ocean	On-Campus
23) Mar 8	Impacts of Humans	On-Campus
24) Mar 11	Climate Change and Ocean Acidification	On-Campus
25) Mar 13	What you can do? Solutions 1	On-Campus
26) Mar 15	What you can do? Solutions 1	On-Campus
Mar TBD	Final Exam (Lectures 22-26)	On-Campus