

**Biology 129 – Summer 2015**  
**Biology of Marine Mammals**  
 Monday/Wednesday 9am–12:30pm  
 Lab Monday/Wednesday 1:30pm–4:30pm  
 Center for Ocean Health 118

	INSTRUCTOR	OFFICE	OFFICE HOURS	EMAIL
Instructor:	Max Tarjan	Long Marine Lab Rm 251	Tuesday 11am–12pm	ltarjan@ucsc.edu
TA:	Deanna Falge		Thursday 12pm–1pm	deanna.falge@gmail.com

Tentative course schedule:

Week	Date	Topics	Assignments
1	June 22	Diversity & Evolution	
	June 24	Locomotion Diving Physiology	Reading Response 1 NOAA “The Tuna-Dolphin Issue”
2	June 29	Osmoregulation Thermoregulation	Partner/paper for posters
	July 1	Foraging Ecology *Guest lecture: Kienle	Reading Response 2
3	July 6	<b>MIDTERM EXAM</b>	
	July 8	Energetics *Guest lecture: Thometz	Poster due for printing
4	July 13	Bioacoustics Sensory systems *Guest lecture: Maresh	Reading Response 3
	July 15	Reproduction Social behavior *Guest lecture: Casey	Poster presentations
5	July 20	Conservation *Guest lecture: Mchuron Review	Reading Response 4
	July 22	<b>FINAL EXAM</b>	

COURSE DESCRIPTION: This class encompasses a survey of cetaceans, pinnipeds, sirenians, polar bears, and sea otters, including natural history systematics, physiology, behavior, and conservation.

\*\*\*In addition to covering the content described above, this course will help you to develop as a scientist. In-class activities facilitate peer-to-peer education. Goals for science practices include: developing testable hypotheses, designing experiments to test hypotheses, using figures to convey an idea, and presenting scientific findings.

CLASS FORMAT: To maximize active learning and engagement with scientific content and practices, each class will involve discussions and/or problem solving. Students may be responsible for reading papers and learning basic material before coming to class. During class some lectures will be given and students will work in small groups to solve problems or have discussions. Your participation in these activities is an essential part of processing the material and contributes to your final grade.

OFFICE HOURS: Students are **enthusiastically** encouraged to attend the office hours. You are welcome to come with specific questions or to just “talk biology.” Office hours at other times are available by appointment. Please refer to the eCommons page for all class instructions and assignments.

TEXT AND WEB MATERIAL: No textbook is required for the course, but you may find the following text informative:  
Hoelzel, A.R. 2002. Marine Mammal Biology: An Evolutionary Approach. Blackwell Publishing, Malden, MA.

The course website is on eCommons under BIOE 129 Summer 2015.

GRADING RUBRIC:

Final	20%
Midterm	20%
Poster presentation	20%
Class participation	20%
Reading responses	20%

POSTER:

You will work with a partner to create a poster representing the research conducted in a published scientific paper. You must inform the instructor of your partner and selected paper by the beginning of week two. A poster session will be held during class on July 15<sup>th</sup>. Poster guidelines will be reviewed during class and can be found on ecommons.

CLASS PARTICIPATION: Part of your class participation grade will be completing practice problems in class. In-class practice problems will share the format of questions on the exam. These are both a learning tool, as well as a way for you to assess your own understanding of the material as the class progresses.

READING RESPONSES: We will have periodic paper discussions during class. As there are many excellent papers in the field of marine mammal biology, students will be responsible for reading a unique paper and sharing the key points with their classmates. You are required to prepare for the discussions by submitting responses to questions in an online form before coming to class. Online forms will be provided by the instructor.

DRC:

If you qualify for classroom accommodations because of a disability, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me as soon as possible, preferably within the first week of the Summer Session. Contact DRC by phone at 831-459-2089 or by email at [drc@ucsc.edu](mailto:drc@ucsc.edu) for more information.