

**LECTURE AND LAB SYLLABUS
INTRO TO MARINE BIOLOGY, BI 11540 and 115L40**

Instructor Randy Honebrink (Phone 587-0111 (b); 947-4543 (h); email hono1999@aol.com)

Meeting Dates/Times Oct 8 – Dec 17; Lecture T,Th 1950-2155, Lab Sa 0800-1210

Course Description Introduction to Marine Biology is a 3-credit course which surveys the major areas of marine biology with emphasis on the structure and function of marine organisms, their interactions with their environment, and human impacts on the marine environment on a local and global scale. Topics include: physical and chemical properties of the marine environment, biodiversity, anatomy, physiology, behavior, and ecology. The 1-credit Biology 115L lab must be taken concurrently with lecture.

Course Objectives At the end of this course, the student will have: 1) an understanding of some basic concepts of marine chemistry and oceanography; 2) an enhanced appreciation of marine biodiversity and habitats; 3) an understanding of how marine organisms are adapted to various habitats; and 4) general knowledge of the field of marine biology.

Required Text *Marine Biology*, (4rd ed.), by Castro and Huber, McGraw Hill, Boston. 2003. There is no laboratory manual; lab handouts will be provided.

Grading Lectures and labs are graded separately. Lecture grades will be based on your performance on weekly quizzes, four biological summaries, a final exam, and class participation and attendance (P/A). Quizzes will be given each Tuesday and cover material presented the previous week. Lab grades will be based on lab write-ups and assignments placed in a lab notebook, a practical exam covering lab topics, and participation and attendance.

<u>LECTURE</u>		<u>LAB</u>	
Quizzes (8 @ 30)	240 pts	Lab notebook	150 pts
Summaries (4 @ 20)	80 pts	Lab practical	50 pts
Final exam	100 pts	P/A	50 pts
P/A	30 pts		
TOTAL	450 pts	TOTAL	250 pts

Grading scale: 90%=A; 80%=B; 70%=C; 60%=D

Attendance Attendance is expected for each lecture and lab. Attendance for labs is especially important, as labs cannot be made up. Unexcused absences for lectures or labs will result in grade penalties to be determined by the instructor. Exams missed because of unexcused absences also cannot be made up. Excused absences should be documented, e.g. physician's note. Early exams will not be given.

Article Summaries Four summaries of articles related to current topics of marine biology will be required at times indicated on the course schedule. Up to two of the summaries may be on a particular marine species. Each summary is worth 20 points, included in the lecture grade. Summaries must be from a newspaper, journal, magazine, or internet source not more than two years old, and pertain to marine biology. Each summary should be one to two pages long, word processed or typed, and double spaced. The summary must include author, title of article, source, date of publication, and page numbers. For web site publications, include author (if known), title, last date updated, URL, and date accessed. You must include a xerox copy of the article with your summary, or a print-out of a web site source.

Lab Notebook You should have separate notebooks for lecture and lab. The lab notebook should be bound (spiral is acceptable), and will be used for observations, drawings, notes, data, and answers to questions on lab handouts. The notebook will be graded from time to time during the course.

IMPORTANT: Chaminade campus lab rules prohibit food, drinks and open-toe footwear.

Academic Honesty Students are expected to comply with the rules governing academic honesty as published by Chaminade University. Students involved in cheating or plagiarism will be issued failing grades for the exam or assignment in question.

TENTATIVE COURSE SCHEDULE

Oct	8	T	Intro to course; sea floor	Chap. 1,2
	10	Th	Properties of sea water	3
	12	Sa (Campus)	Intro to lab, microscopes	
	15	T	Basics of biology	4
	17	Th	Microbes	5
	19	Sa (Campus)	Intro to plankton	
	22	T	Algae	6
	24	Th*	Intro to invertebrates	7
	26	Sa (Campus)	Invertebrate behavior, dissections	
	29	T	Invertebrates, continued	7
	31	Th	Intertidal communities	11
Nov	2	Sa (Campus)	Field trip – Paiko Lagoon, Makapu‘u Tidepools	
	5	T	Intro to fishes	8
	7	Th*	Fishes, continued	8
	9	Sa (Campus)	Fish form and function, dissections	
	12	T	Marine reptiles and mammals	9
	14	Th	Intro to ecology	10
	16	Sa (Shafter)	Field trip – Coconut Island	
	19	T	Coral reefs	14
	21	Th*	Life near the surface	15
	23	Sa (W Aq)	Field trip – Waikiki Aquarium	
	26	T	Ocean depths	16
	28	Th	THANKSGIVING	
	30	Sa (Shafter)	Field trip – Anuenue Fisheries	
Dec	3	T	Resources from the sea	17
	5	Th*	Humans and the ocean	18
	7	Sa (Campus)	Lab practical, begin review for final exam	
	10	T	Finish review for final exam	
	12	Th	Final exam	
	14	Sa	TBA	
	17	T	Reserve day	

* Marine article summaries due