WE '00

Chaminade University
Winter 2000

LECTURE AND LAB SYLLABUS
INTRO TO MARINE BIOLOGY 115L

Instructor — **Randy Honebrink (Phone 587-0111 (b); 947-4543 (h); email** hono 1999@aol.com)

Meeting Dates/Times — **Jan 11 -Mar 21; T, Th, Lecture 1730-1935, Lab 1950-2155**
Chaminade University requires that some labs be held on the main campus. In addition, there will be three Saturday field trips which will be held in lieu of Thursday evening sessions (see course schedule).

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 interaction with their environment, and human impacts on the marine environment on a local and global scale. Topics include: physical 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 under standing of how marine organisms are adapted to various habitats; and 4) general knowledge of the field of marine ecology.**

Required **Text** — *Marine Biology: An Ecological Approach,* **(4th ed.), by James** Nybakken, Harper Collins, N.Y., N.Y. 1997. **There is no laboratory manual; lab hand-outs will be provided.**

Gradin — **Lectures and labs are graded separately. Lecture grades will be based on your performance on two exams, three biological summaries, one species paper, and class participation and attendance (P/A). Lab grades will be based on lab assignments placed in a lab notebook, a lab exam, and partici-pation and attendance.**

LECTURE		**LAB**	
Exam 1	**100 pts**	**Lab notebook**	**130 pts**
Exam 2	**100 pts**	**Lab exam**	**100 pts**
Summaries	**60 pts**	**P/A**	**20 pts**
Species paper	**70 pts**	*TOTAL*	**250 pts**
P/A	**20 pts**		
TOTAL	**350 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 — **Three summaries of articles related to current topics of marine biology will be required at times indicated on the course schedule. Each summary is worth 20 points, included in the lecture grade. Summaries must be from a newspaper, journal, magazine, or electronic 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.**

Species Paper — **You will be required to write a short (three to four page) research paper on the biology of a marine species of your choosing. The paper will be due February 24, at which time you will present it to the class. Further infor-mation on requirements for the paper will be provided during the second week of class.**

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 note-book will be graded once at the end of the course, but will be collected from time to time for examination.**

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

TENTATIVE COURSE SCHEDULE

DATE		*LECTURE*	*CHAP.*	*LAB*
Jan 11	T	Introduction to marine environ.	1	Intro to lab, microscope
13	Th	Ecology of marine environment	1	Classification keys
18	T	Plankton	2	Plankton analysis
20	Th	Nekton, deep sea biology	3,4	Intro to fish form, function
25	T*	Biology of teleost fishes	Handouts	Fish dissections (Campus)
29	S	Fish form and function	Handouts	Field trip Waikiki Aquarium
Feb 1	T**	Biology of sharks	Handouts	Human/shark interactions
3	Th	Feeding ecology of fishes	Handouts	Dangerous mar. organisms
8	T	Nearshore, intertidal ecology	5,6	Invertebrate identification
10	Th	Exam 1		
15	T*	Biology of invertebrates II	Handouts	Invert dissections (Campus)
19	S	Tidepools, mudflats	Handouts	Field trip Paiko/Makapu'u
22	T**	Coral reefs	9	Coral biology, identification
24	Th	Symbiotic relationships	10	Species paper presentations
29	T	Human impacts	11	TBA
Mar 2	Th	Fisheries management	11	Coral reef diversity
7	T	Endangered marine species		Review for lab exam
11	S	Coral reef diversity	Handouts	Field trip Coconut Island
14	T*'**	Summary, review (Campus)		Lab exam, notebook due
16	Th	Exam 2		
21	T	Reserve day		

Class meets at Chaminade University, Henry Hall
Marine biological article summaries due