

Chaminade University
Fall 2001

LECTURE AND LAB SYLLABUS
INTRO TO MARINE BIOLOGY, BI 11501 and 11501L

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

Meeting Dates/Times Oct 1 -Dec 12; Lecture M,W 1950-2155, tab 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 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 understanding of how marine organisms are adapted to various habitats; and 4) general knowledge of the field of marine biology.

Required Text *Marine Biology*, (3rd ed.), by Castro and Huber, McGraw Hill, Boston. 2000. 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 Monday 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.

| LECTURE | | LAB | |
|--------------------|----------------|---------------|----------------|
| 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

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- 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 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.
- 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.
- 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.

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TENTATIVE COURSE SCHEDULE

| | | | | |
|-----|----|--------|---|----------------|
| Oct | 1 | M | Intro to course; sea floor | C ap. 1,2 3 |
| | 3 | W | Properties of sea water | |
| | 6 | Sa (C) | Intro to lab, microscopes | |
| | 8 | M | Business of life | 4 |
| | 10 | W | Prokaryotes, protists, plankton | 5 |
| | 13 | Sa (C) | Plankton identification | |
| | 15 | M | Algae; classification of organisms | |
| | 17 | W * | Intro to invertebrates | 6 |
| | 20 | Sa (C) | Invertebrate behavior, dissections | |
| | 22 | M | Intro to fishes | 7 |
| | 24 | W | Fishes, continued | |
| | 27 | Sa (C) | Fish form and function, dissections | |
| | 29 | M | Marine reptiles and mammals | 8 |
| | 31 | W* | Intro to ecology | 9 |
| Nov | 3 | Sa | Field trip - Base tidepools | |
| | 5 | M | Coral reefs | 13 |
| | 7 | W | To be announced | |
| | 10 | Sa | Field trip - Waikiki Aquarium | |
| | 12 | M | Coral biology, identification | |
| | 14 | W* | Intertidal communities | 10 |
| | 17 | Sa (C) | Field trip - Paiko Lagoon, Makapu'u Tidepools | |
| | 19 | M | Life near the surface | 14 |
| | 21 | W | Ocean depths | 15 |
| | 24 | Sa | Field trip - Coconut Island | |
| | 26 | M | Resources from the sea | |
| | 28 | W* | Human impacts | 17, 18 |
| Dec | 1 | Sa (C) | Lab practical | |
| | 3 | M | Review for final exam | |
| | 5 | W | To be announced | |
| | 8 | Sa | Field trip - Makapu'u Point (tent.) | |
| | 10 | M | Final exam | |
| | 12 | W | Reserve day | |

(C) Class meets on Campus, Henry Hall

*** Marine article summaries due**