FALL 2015
BI115/L: INTRODUCTION TO MARINE BIOLOGY AND LAB

Course and Instructor Information

Lecture: Monday 5:30–9:40PM – Schofield Barracks, Room SB
Lab: Saturday 8:00–12:15PM – Chaminade, Henry Hall Lab 3

Instructor: Jane Chang Mi
Email: jane.mi at adjunct.chaminade.edu
Office Hours: by appointment

Required Text

Karleskint, George, Richard L. Turner, and James W. Small. Introduction to Marine Biology. 4th ed. Belmont, CA: Brooks/Cole, Cengage Learning, 2013. ISBN 9781133364467
Niesen, Thomas M. The Marine Biology Coloring Book. 2nd ed. Coloring Concepts Series. New York: Harper Resource, 2000. ISBN: 9780062737182.

Supplemental Texts

A link will be provided to a course reader on the first day of class.

Course Description

Life in various marine habitats studied with regard to its relationship to the ocean and to man. Various zones in the ocean and its inhabitants, the impact of man on the marine environment, and foods sources from the sea will be discussed. Fulfills the General Education science requirement for non–science majors when taken with BI101L or B115L. *Concurrent registration in BI 115L necessary for lab science credit.*

Course Objectives

The course is designed to fulfill the following objectives:

- To present the basic facts, concepts, and principles of marine biology;
- To examine marine organisms, habitats, and ecosystems;
- To discuss current and Hawaiian topics relating marine biology to other fields, such as history, economics, and the social sciences. Topics affecting the Hawaiian islands and the greater Pacific will be examined.

Course Learning Outcomes

At the completion of the course, the student will be able to:

- Know what science is and how scientific research is conducted
- Understand the basic concepts in marine biology
- Demonstrate an understanding of marine living organisms and their relationship to the marine environment;
- Identify marine ecosystems and their characteristics in the Hawaiian islands.
- Know the names of a number of marine organisms that occur in Hawaiian waters.
- Explain the relationship between marine biology and other disciplines.
- Explain a current issue in marine biology or the marine environment.
- Understand the detrimental effect(s) on the marine ecosystems
- Be familiar with some of the specific mechanisms diverse indigenous people of the Pacific employ(ed) in gathering ocean resources that may be considered sustainable practices
- Understand and be able to make decisions concerning themselves, marine organisms and the marine environment.
- Demonstrate an understanding of the connections between academic work and real–life situations

FALL 2015
BI115/L: INTRODUCTION TO MARINE BIOLOGY AND LAB

Grades

Each class you will be evaluated on the success and the presentation of the assigned projects as well as the quality of effort. Class participation and engagement and understanding of the reading material will also be evaluated. Final grades are the average of all grades in combination with attendance records.

Separate grades will be given for lecture and laboratory. It is possible to receive different grades for lecture and laboratory. Final grades are the average of all grades in combination with attendance records.

The grade weights for **lecture** will be as follows:

- Class Participation – 10%
- Marine Issue Presentation – 20%
- Quizzes – 20%
- Midterm Exam – 20%
- Final Exam – 40%

The Midterm will cover the material from the start of class up until the day of the exam; the Midterm will have a variety of types of questions. The final exam is cumulative and covers the lecture material for the entire semester. A review sheet will be handed out before every exam.

The grade weight for **lab** will be as follows:

- Class Participation – 10%·
- Hawaiian Critter Presentation – 10%
- Daily Mahina (Lunar) Observations – 20%
- Weekly Water Quality - 20%
- Field Summaries – 40%

Each of the items/activities listed above will be described to you in writing or orally in class.

Extra Credit

Throughout the course there will be talks and presentations you may attend that pertain to the course material. I will let you know when these opportunities arise or you may discover them and bring them to the class' s attention. You can earn 1% extra credit points towards a lecture exam for each talk you attend with content related to the course content.

In order for the extra credit to count they must be approved prior to the event. Also your presence must be documented with a photograph of yourself participating and the name and phone number of the person in charge or the speaker/presenter. If there are any handouts from the event bring them as evidence of your attendance as well. You may earn up to 10% points from attending talks/presentations.

Syllabus and Course Schedule Subject to Change

The syllabus and course schedule are living documents; they may grow and change. Topics and assignments are subject to change especially with respect to weather and tides. Several labs will be in the field and entail travel to sites. I will adhere as closely as possible to them for your

convenience, but there may be times in which we will take longer on a particular topic or add or delete a topic to enhance the course. The course experience is custom fit for you!

		COURSE SCHEDULE	CHAPTERS
OCT	5	Introduction to Course + Marine Biology + Ecology	1 + 2
	10	Introduction to Lab and the Scientific Method + Water	
	12	NO CLASS	
	17	Field trip: Waikiki Aquarium	
	19	Geology + Water, Waves, and Tides	3 + 4
	24	Biological Concepts + Microbes + Multicellular	5 + 6 + 7
	26	QUIZ + Invertebrates	8 + 9
	31	Field trip: Hanuama Bay (early)	
NOV	2	Marine Fishes, Reptiles and Birds	10 + 11
	7	Dissect Fish	
	9	Marine Mammals (Charles Littnan)	12
	14	Field trip: Paepae o He'eia	
	16	Intertidal Communities + Estuaries + Coral Reef	13 + 14 + 15
	21	Field trip: PVS + Hikianalia	
	23	MIDTERM	
	28	THANKSGIVING – NO CLASS	
	30	Continental Shelf + Open Sea + Ocean Depth	16 + 17 + 18
DEC	5	Field Trip: HIMB – Coconut Island	
	7	QUIZ + Humans and the Sea	19 + 20
	12	Lab practical + Final Exam Review	
	14	FINAL EXAM	
	19	RESERVE DAY	

FALL 2015
BI115/L: INTRODUCTION TO MARINE BIOLOGY AND LAB

Additional Departmental and University Polices

The following policies are summarized from the *Student Handbook*. Please be sure that you have reviewed these and other policies that your *Handbook* contains.

Electronic Devices

Use of music devices and cell phones is prohibited during all Natural Science and Mathematics classes at Chaminade, unless specifically permitted by your instructor. Use of cellphones and music devices in laboratories is a safety issue. In addition, use of cellphones and music devices in any class is discourteous and may lead to suspicion of academic misconduct. Students who cannot comply with this rule will be asked to leave class and may be subject to laboratory safety violation fines. You will be asked to leave class and marked absent if you do not comply. This will negatively affect your grade. Please refer any questions to the Dean of Natural Sciences and Mathematics.

ADAA Statement

Chaminade will provide assistance for any student with documented disabilities. Any student who believes he/she may need accommodations in this class must contact Dr. June Yasuhara (735–4845), at the Counseling Center (office is next to security), in order to determine if you meet the requirements for a documented disability in accordance with the Americans with Disabilities Act. Please contact Dr. Yasuhara as soon as possible so that accommodations can be implemented in a timely fashion.

Attendance

This class covers a lot of material in a short period of time. There is no way to make up a class. You are responsible for work due on the day you are absent and for assignments given on the day you missed. An emergency or illness is the only acceptable excuse. You must let me know, prior to the class meeting, that you will a) miss the class and b) the reason why you did not attend. Notification may be done through email.

If you miss a **lecture** or **lab** your absence must be excused if it is not to affect your grade. Excused absences occur when you bring in a doctor's note, a funeral announcement for a family member, notice of participation in athletic events, etc. Unexcused absences in all other cases and will negatively affect your grade.

Unexcused absences equivalent to more than a week of classes will lead to a grade reduction for the course. Any unexcused absence of two consecutive weeks or more may result in being **withdrawn** from the course by the instructor, although the instructor is not required to **withdraw** students in that scenario. Repeated absences put students at risk of failing grades.

Any student who stops attending a course without officially **withdrawing** may receive a failing grade.

Tardiness

Class begins promptly. There is a 15–minute grace period. For example, if you arrive to class after 8:15am you will be marked tardy. Every tardy is a 1/3 grade point down on your final grade (A+ to A). If you are later than 15 minutes you will be marked absent. Each (unexcused) absence will result in one full grade letter down (A+ to B+). Three unexcused absences result in a failed grade in the class (F).

FALL 2015
BI115/L: INTRODUCTION TO MARINE BIOLOGY AND LAB

Policy on Make-Ups

Early exams are not given. Quizzes and exams missed because of unexcused absences cannot be made up. Excused absences should be documented, e.g., a physician's excuse, and will be considered by the instructor for a valid absence.

Laboratory Safety Information

The following guidelines are established to provide instructions in maintaining safety for students, staff, and faculty while using any of the science laboratories at Chaminade University. The Division of Natural Sciences and Mathematics (NSM), along with the University Environmental Safety Office are responsible for enforcing the regulations set forth in the current Student Handbook. Queries should be addressed to: Dean of Natural Sciences and Mathematics (808) 440-4204; Environmental Safety Officer (808) 739-4811

Academic Honesty

Students are expected to have read and to abide by the "Student Rules of Conduct" which are available in your copy of Chaminade University' s Student Handbook. Cheating in the form of plagiarism, collusion, deception and will not be tolerated and will negatively affect your grade.

Freedom of Expression

Students are free to take reasoned exception to the views offered in a particular course of study. They may be required to know thoroughly the specific bodies of knowledge or interpretations or theories set forth by the professor, but are free to reserve judgment as to the truth or falsity of them.

Students are expected to maintain the standards of academic performance articulated in course syllabi, supplemental readings, assignments and Academic and Student Affairs policies. The instructor is considered the normal and competent judge of academic work. Students have an appeals process in the rare case of unjust grading and evaluation by the procedure detailed in the Academic Grievance section of the Student Handbook.

Classroom Atmosphere

I value an open, yet courteous class atmosphere. Express your ideas and ask questions! The only dumb question is the one in which you ask yourself if you should ask your question. Respect the thoughts and ideas and opinions of others really think about what others say. Let them fully express their thoughts and ideas and then you do the same. **You will learn as much from each other as you do from me.**

YOU ARE RESPONSIBLE FOR ALL OF THE INFORMATION IN THIS DOCUMENT!