SUFFOLK COUNTY COMMUNITY COLLEGE  
Ammerman Campus  
Biology Department  
www.sunysuffolk.edu/Web/Selden/Bio

Course Title: Marine Biology  
Instructor: Staff  
Catalog No: MAR 111  
Semester: Fall, 2008

COURSE DESCRIPTION
This course is designed for non-science students.

COURSE OBJECTIVES:
By the end of the course, students will be able to...
1. Apply the Scientific Method in the laboratory/field experiences. Students will employ critical analysis and synthesis of concepts. Students will conduct research in individual and group projects.
2. Explain why the properties of water make it a universal requirement for life. Define salinity and the major components in seawater. Describe how these physical and chemical properties of the water affect marine organisms.
3. Define diversity and construct an argument to show that it is a unifying theme in biology. Interpret the major characteristics of marine organisms in the context of their evolutionary relationships; yielding diversity.
4. Identify the primary producers in the ocean and the organisms in the major invertebrate and chordate phyla. Explain the strategies that have enabled their adaptation to their specific marine environment. Interpret the distribution of life in the oceans and other marine environments (looking at organisms found in estuaries, intertidal and subtidal zones, rocky shores, coral reefs, deep ocean & arctic regions) in the context of their adaptations.
5. Provide examples of environmental problems facing marine communities. Evaluate steps that can be taken to improve these conditions and create competing possible solutions.

ATTENDANCE:
The College expects that each student will exercise personal responsibility with regard to class attendance. All students are expected to attend every class session of each course for which they are registered. Students are responsible for all that transpires in class whether or not they are in attendance. In MAR 111, absence from more than one laboratory will result in a failing lab grade and will result in removal from the class roster (W). A student may be removed from the class roster by an instructor at any time when, in the judgment of the instructor, absence/lateness has been excessive or when a student is disruptive or disrespectful.

REQUIRED BOOKS:
Lecture:

Laboratory:
Optional: Dissection manual and local Field Guides (various)
GLOVES ARE REQUIRED FOR DISSECTIONS; lab coats are recommended.
GRADING:

Lecture: Two-Three lecture exams will be given. These constitute 20-30% of your course grade.

Laboratory: Your laboratory grade will constitute 30-40% of your course grade. It will be based on two laboratory exams (each; covering material from in-class laboratory assignments), various field trip assignments, and lab exercise(s).

Final Exam: A cumulative final exam will constitute 20-30% of your course grade.

“Project” In some sections an individual research project may be required and will constitute a percentage of your final grade. Individual instructors will provide details in their supplements to the Course Outline.

Withdrawal: The last “official” date to withdraw from the course is posted each semester but some instructors will accept later withdrawals. Please see individual instructor for exceptions.

ADDITIONAL (General) COURSE INFORMATION:

Course and Lab Schedule/Materials:

The following subjects may be covered in your lecture material (in approximately the following order): History (of Marine Biology and Local Environment), Long Island Marine Biology and Local Species, Seawater and Chemical Composition of Water, Food Webs, Marine Zones and Ecology, Communities, Species Diversity, Invertebrate Zoology, Ichthyology, Marine Mammal Biology and “Problems” Facing the Local and Global Marine Environment. The course will also cover, through these preceding sections, various marine habitats (both local and global).

The following labs may be completed during your weekly Laboratory sessions (in approximately the following order): Sampling Seawater, Taxonomic Classification and Identification, Plankton, Lower Marine Invertebrates, Arthropods, Mollusks, Echinoderms and Cartilaginous and Bony Fish

Additional Notes:

FIELD TRIPS:

This course involves various field trips. As you'll note from the syllabus, some are held during class/lab hours but 1 (or more) required(optional) trips will be offered on Weekends. It is understood that some students have other commitments but you are encouraged to make arrangements to attend the trips. They are the best part of the course, as past students will tell you. If you cannot attend the field trips, make-up projects and/or papers must be completed for each missed trip. Again, the details of these field trips and make-up assignments will be distributed early in the semester.