

Adaptations of Marine Animals

Charlie Hunter

Course Syllabus

Time: MF, 8-5; W, 8-3:30; Lecture, Laboratory; Field Work as Scheduled;

Supplies:

Boots or footwear that you can get wet/muddy
Rite-in the Rain field notebook
Dissection Kit

What This Course Is About:

“Animals exhibit a wide range of biochemical, physiological, morphological (structural), behavioral and ecological adaptations for living in diverse marine habitats. This class will explore the adaptations of animals for life in rocky intertidal areas, sandy beaches and estuarine habitats (particularly mudflats). Through lectures, discussions, field trips and projects, we will examine adaptations to a variety of environmental stresses and problems, with emphasis upon the local fauna. Stresses/problems covered will include temperature, air and light exposure, wave action, locomotion, salinity, oxygen, predation, feeding and reproduction. Students will have an opportunity to participate in group research projects, and conduct several small-scale projects both in the field and laboratory.”

What we are examining in this course are several local marine environments and those features that contribute to the survival of various animals in those habitats. Although examples of animals from other regions and habitats will be used, the emphasis is on local habitats (rocks, sand and mud) and their inhabitants. I will present material in the classroom in a variety of ways including lectures, slide and power-point presentations, demonstrations and discussions. However, much of this course focuses on field and lab work and specific questions/problems that are posed in those settings.

Requirements and Evaluation: The final grade is determined by a midterm and final written exam, an animal identification quiz, exploratory projects, each examining a specific and different type of adaptation, natural history sketches, and oral and written reports to be assigned.

My grading scale is as follows:

A = > 93%
A- = 90-92%
B+ = 87-89%
B = 83-86%
B- = 80-82%
C+ = 77-79%
C = 73-76%
C- = 70-72%
D+ = 67-69%
D = 63-66%
D- = 60-62%
F = 59% or less

Exploratories: Rather than have you conduct a single comprehensive project, you will be expected to complete and present the results from three exploratory projects through the course of the summer. These are small projects where you will pose a question pertaining to a specific adaptation, and then conduct an investigation of that problem.

