Biology and Conservation of Marine Mammals
FW302

Credit hours: 4

Term offered: Summer

Instructor: Jim Sumich

Course objectives:
The successful student will be able to:

- List the major taxonomic groups of extant marine mammal groups and provide a species example of each.
- Examine the known evolutionary history of cetaceans and pinnipeds.
- Describe the zoogeographic patterns of selected species of marine mammals.
- Illustrate the patterns of apneustic breathing and the anatomical and physiological adaptations used for long breath holds.
- Describe the relationships between cetacean migratory cycles, reproductive patterns, and cycles of marine phytoplankton production.
- Describe the anatomic and acoustic bases of echolocation in cetaceans.
- Formulate a program for the conservation of a hypothetical stock of a seriously depleted marine mammal stock or species.

Course content: An examination of the biology of whales, pinnipeds, and other marine mammals, include general adaptations to a marine existence; systematics and biogeography; reproduction; diving physiology; communication and echolocation; feeding and migratory behavior; and marine mammal/human interactions. Emphasis will be placed on species occurring in the North Pacific Ocean.

Prerequisite(s): One year of introductory biology (enforced)


Term paper(s): Research paper

Testing: Midterm and final

Students for whom the course is intended: Students interested in the conservation of marine mammals and ecosystems.