Ecology

Ecology Classes

ECOL 211: Sustainable Aquaculture

This class will provide you with an introduction to the science of aquaculture: historically known as fish farming. Although we will be spending the majority of time talking about fishes, aquaculture also includes the farming of invertebrates, as well as plants. During the semester, we will be discussing all aspects of aquaculture including economics, diseases, nutritional requirements, and rearing techniques for various aquatic species.

Units: 3

Program: Ecology

ECOL 330: Fish Biology

An introduction to species diversity, natural history, and ecological and evolutionary relationships of fishes. Emphasis on form and function, ecology, behavior, sensory modes, fishery management, global crises in fisheries, and marine protected areas. Laboratories include identification of major groups of fishes, methodology and experimental approaches to the study of fishes.

Units: 4
Prerequisites:

any BIO, ECOL, EOS, or CHEM course, or consent of instructor.

Program: Ecology

ECOL 370: Terrestrial Plant Ecology

Terrestrial plants have been present on this planet for 440 million years and play a critical role as the basis of the terrestrial food chain. This course introduces students to the diversity of plant life and how plants have evolved and adapted to their respective environments. Topics include plant structure and growth, species interaction, community ecology, and succession.

Units: 4

Program: Ecology

ECOL 402: Aquatic Conservation

This course examines the problem of maintaining biological diversity in a human dominated world within the aquatic ecosystems. Emphasis is on the biological concepts involved in population biology, genetics and community ecology, and their use in conservation and management of biodiversity. We will investigate the impacts of human-induced climate change, pollution, introduction of exotic species, over fishing, and endangered species conservation.

Units: 3

Prerequisites:

Any BIO, ECOL, EOS, or CHEM course, or consent of instructor.

Program: Ecology

ECOL 435: Alien Invaders

This course is designed to provide students with perspective on the impacts of exotic species, those organisms that are not native to a geographical area, primarily within Southern California but will also cover major invasions in the USA. The ecological, genetic, and evolutionary impacts of the invasions will be explored. Additionally, the management and control of exotic species will be discussed.

Units: 3
Prerequisites:

any BIO, ECOL, EOS, or CHEM course, or consent of instructor.

Program: Ecology

ECOL 444: Ecological Methods

Students learn experimental design, data collection, analysis, synthesis, and interpretation of data derived from field sampling and experiments in ecological studies. The class also covers data collection for impact assessment and environmental monitoring.

Units: 3

Prerequisites:

any BIO, ECOL, EOS, or CHEM course, or consent of instructor.

Program: Ecology