

ENVIRONMENTAL SCIENCE/ ECOLOGY (ESEC)

ESEC A100 3 Units (54 lecture hours)

Introduction to Environmental Science

Grading Mode: Standard Letter

Transfer Credit: CSU; UC

The physical and biological components of the environment, their interrelationships, and the human population influence on these components. Physical, biological, and political means of reversing environmental deterioration will be considered as well as conservation and management of natural resources. Suitable as a general education elective for the non-science major and for students in Environmental Science or other natural sciences. Field trip may be required. Same as ECOL A100, Human Ecology.

ESEC A100H 3 Units (54 lecture hours)

Introduction to Environmental Science Honors

Grading Mode: Standard Letter

Transfer Credit: CSU; UC.

The physical and biological components of the environment, their interrelationships, and the human population influence on these components. Physical, biological, and political means of reversing environmental deterioration will be considered as well as conservation and management of natural resources. Suitable as a general education elective for the non-science major and for students in Environmental Science or other natural sciences. Field trip may be required. Same as ECOL A100 - Human Ecology.

ESEC A101 3 Units (54 lecture hours)

Principles of Ecology

Grading Mode: Standard Letter, Pass/No Pass

Transfer Credit: CSU.

This introductory ecology course for non-science majors covers ecological principles and their relevance at several levels of organization. Includes principles governing classification of life, principles of evolution, conditions for life, adaptations to the environment, analysis of ecological niches, population, and community/ecosystem ecology. Field trips are required. Same as ECOL A101 - Principles of Ecology.

ESEC A110 3 Units (54 lecture hours)

Island Ecology

Grading Mode: Standard Letter, Pass/No Pass

Transfer Credit: CSU.

Islands are used as the platform to discuss Ecology, Evolution, Speciation, Biogeography, Geology, and Human History as it relates to islands. This course focuses on California's Channel Islands and also covers the Hawaiian Islands, the Galapagos Islands, and many others. Field trip is required. May be taken for grades or on a pass-no pass basis. Same as ECOL A110 - Island Ecology.

ESEC A121 1 Unit (9 lecture hours; 27 lab hours)

Marine Intertidal Ecology

Grading Mode: Standard Letter, Pass/No Pass

Transfer Credit: CSU

Ecology of the marine intertidal environment of Southern California. This is a field oriented laboratory experience for non-majors. May be taken for grades or on a pass-no pass basis. Same as Marine Science A121 and Ecology A121. Students completing Ecology A121 or ESEC A121 may not receive credit for Marine Science A121.

ESEC A124 1 Unit (9 lecture hours; 27 lab hours)

Ecology of the Gray Whale

Grading Mode: Standard Letter, Pass/No Pass

Transfer Credit: CSU.

Ecology and natural history of the California Gray Whale and the Orange County Whale Watch program. Completion qualifies students as docents on whale watching boats. Field trip required. May be taken for grades or on a pass-no pass basis. Same as Marine Science A124 and Ecology A124. Students taking Ecology A124 or Environmental Science A124 may not receive credit for Marine Science A124.

ESEC A140 2 Units (18 lecture hours; 54 lab hours)

Mediterranean Biome Ecology

Grading Mode: Standard Letter, Pass/No Pass

Transfer Credit: CSU.

The Mediterranean Biome includes chaparral and coastal sage scrub in North America, mallee scrub in Australia, matorral in South America, fynbos in Africa, and maquis in Europe. This course surveys this biome through an investigative approach. Field trips are required. Same as ECOL A140 - Mediterranean Biome Ecology.

ESEC A141 2 Units (18 lecture hours; 54 lab hours)

Desert Ecology

Grading Mode: Standard Letter, Pass/No Pass

Transfer Credit: CSU.

Deserts cover 20% of the Earth and provide wildlife habitat, as well as, economic and recreational value. This course will provide students an opportunity to learn and assess the ecological processes in various deserts on Earth including the deserts of Southwestern United States and Mexico. Field trips are required. Same as ECOL A141 - Desert Ecology.

ESEC A210 3 Units (54 lecture hours)

Wetlands Ecology and Management

Advisory: BIOL A100, BIOL A100H, ESEC A100, ESEC A100H, ESEC A101, GEOL A105, GEOL A105H, HORT A100, MRSC A100 or MRSC A100H.

Grading Mode: Standard Letter, Pass/No Pass

Transfer Credit: CSU.

This course covers the biological, physical, chemical, and hydrological components of wetland ecosystems. Various types of wetland habitats are discussed including their ecological and economic value. Field-based assessments on wetland ecology are implemented throughout the course. Management practices are investigated including past and current methods, policies, restoration efforts and outcomes, and the effects of climate change on wetlands are examined. Same as ECOL A210 - Environmental Science & Ecology.