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 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. Graded or Pass/No Pass option. 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. Graded or Pass/No Pass option. Same as MRSC A121 and ECOL A121. Students completing ESEC A121 or ECOL A121 may not receive credit for MRSC 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. Graded or Pass/No Pass option. Same as MRSC A124 and ECOL A124. Students completing ESEC A124 or ECOL A124 may not receive credit for MRSC A124.

ESEC A140 **1 Unit (9 lecture hours; 27 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, mattoral 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. Graded or Pass/No Pass option.

ESEC A141 **1 Unit (9 lecture hours; 27 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. Graded or Pass/No Pass option.

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. Graded or Pass/No Pass option.