

# Zoology (ZOOL)

## **ZOOL 101: Principles of Zoology**

An introduction to the study of animal life. Basic principles of biology are covered including the role of plants as primary producers of chemical energy. The mechanisms of digestion, circulation, osmoregulation, excretion, locomotion, nerve action and reproduction in representative animals are discussed. The chemical and cellular mechanisms involved in the transmission of inheritance are studied. The evolution of plant and animal life, the interaction of organisms in their environment, food chains and trophic levels, and ecological distributions are introduced. Representative animal phyla including both invertebrates and vertebrates are studied from the viewpoint of systematics and structural characters. This course is designed to provide the student with basic information and vocabulary in preparation for advanced courses in zoology and biology.

Credits: 3

Prerequisites: ENG 22 or ENG 24 with a grade of CR or equivalent or Placement in ENG 100

Co-Requisites: ZOOL 101L

## **ZOOL 101L: Principles of Zoology Lab**

Companion laboratory to ZOOL 101 Principles of Zoology. The laboratory and field activities in ZOOL 101L provide an overview of an introduction to the study of animal life. Basic principles of biology are covered including the role of plants as primary producers of chemical energy. The mechanisms of digestion, circulation, osmoregulation, excretion, locomotion, nerve action and reproduction in representative animals are discussed. The chemical and cellular mechanisms involved in the transmission of inheritance are studied. The evolution of plant and animal life, the interaction of organisms in their environment, food chains and trophic levels, and ecological distributions are introduced. Representative animal phyla including both invertebrates and vertebrates are studied from the viewpoint of systematics and structural characters.

Credits: 1

Prerequisites: ZOOL 101 with a grade of C or better or concurrent enrollment and Placement in ENG 100

## **ZOOL 200: Marine Biology**

An introduction to marine animals and plants; their ecological relationships, structures and systematics; physical and chemical characteristics of the marine ecosystems; survey of marine environments; and utilization, exploitation, pollution, and conservation of marine resources; with special emphasis on the Hawaiian marine environment.

Credits: 3

Prerequisites: ENG 22 or ENG 24 with a grade of C or better or equivalent

Co-Requisites: ZOOL 200L

Recommended Prep: ZOOL 101, ZOOL 101L

## **ZOOL 200L: Marine Biology Lab**

Companion laboratory to ZOOL 200 Marine Biology. The laboratory and field activities in ZOOL 200L provide an overview of marine life in Hawai`i inclusive of taxonomy, body structure and function, geographical distribution and ecological relationships. The physical and chemical features of Hawai`i's varied marine environments are also examined.

Credits: 1

Prerequisites: ZOOL 200 with a grade of C or better or concurrent enrollment and Placement in ENG 100