BIOO - Biology-Organismal

BIOO 162CS  Insects and Human Society: 3 Credits (2 Lec, 2 Lab)
Ways in which research and advances in technology in the areas of insect biology and management have influenced people’s lives throughout the world. Focus will be on insects as major factors affecting the areas of the world where humans live, crops and animals humans produce, and general quality of life on the planet. Interactions of insects and human cultures, technologically oriented and indigenous, non-technology based cultures, and concepts of pest management will also be explored. Students generate and test hypothesis and evaluate sources of scientific information on these topics.

BIOO 220  General Botany: 3 Credits (3 Lec)
PREREQUISITE: BIOB 170IN. This course focuses on organisms that possess plastid organelles in all their cells, and investigates their function (physiology, biochemistry), diversity, life cycles, and environmental adaptations

BIOO 230  Identification of Seed Plants: 4 Credits (2 Lec, 2 Lab)
PREREQUISITE: BIOB 170IN. Identification of conifers, trees and shrubs, and herbaceous seed plants; determination by use of manuals; vocabulary, classification and nomenclature; and preparation and collection of seed plant specimens. Offered in spring

BIOO 262IN  Introduction to Entomology: 3 Credits (2 Lec, 2 Lab)
PREREQUISITE: One of the following: BIOL 100IN, or BIOB 170IN. General biology of insects including principles of morphology, physiology, behavior, ecology, and control. Includes identification of major orders and common families.

BIOO 310  Comparative Vertebrate Anatomy: 4 Credits (2 Lec, 4 Lab)
PREREQUISITE: BIOB 170IN or BIOB 258. A comparative study of organ systems of vertebrates. Laboratory utilizes representative vertebrate types

BIOO 412  Animal Physiology: 3 Credits (3 Lec)
PREREQUISITE: BIOB 160 or BIOB 260; and any Chemistry course; Junior or Senior standing recommended. General homeostatic physiology of animals with emphasis on mammals. Selected body systems are covered with major emphasis on the integration of body processes. Offered in the fall

BIOO 415  Ichthysology: 3 Credits (2 Lec, 1 Lab)
PREREQUISITE: BIOO 310 or BIOO 412 and at least Junior standing. Characteristics, classification, evolution, and life histories of major groups of marine and freshwater fishes, with an emphasis on North American freshwater fauna. Laboratory emphasizes identification, morphology, life history, and distribution of Montana species. Offered in spring

BIOO 418  Ecological Physiology of Aquatic Organisms: 3 Credits (1 Lec, 2 Lab)
PREREQUISITE: BIOO 412 and currently in a Biological Sciences Major or Consent of Instructor. Provides a strong foundation on the physiological processes and systems that drive organismal responses to changes within the ecosystems they inhabit, with an emphasis on aquatic organisms. Students will learn to perform and interpret physiological measurements as well as read and discuss current scientific literature that connects physiology with wildlife management and conservation biology. Offered in the fall

BIOO 433  Plant Physiology: 3 Credits (3 Lec)
PREREQUISITE: Junior standing, BIO 160 and one of the following: CHMY 211, CHMY 321, or CHMY 123. Physiological processes of higher plants, including photosynthesis, water relations, mineral nutrition, and development