

# ZOOLOGY (ZOO)

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## ZOO2010 GENERAL ZOOLOGY (3.00 Credits)

Basic course pertaining to the development, anatomy, physiology, genetics, ecology and evolutionary relationships of the animal kingdom. Upon successful completion of this course, the students will be able to comprehend the basic zoological principles and processes of phylogeny, physiology, genetics and ecology.

Total Contact Hrs: 48.00

Lecture Hrs: 48.00

Complete all the courses in the following option:

- Pre or Corequisite: ZOO2010L (minimum grade: C)

## ZOO2010L GENERAL ZOOLOGY LABORATORY (1.00 Credits)

Upon successful completion of this course, the students should be able to demonstrate a knowledge of the animal kingdom through prescribed activities that focus on the morphology, anatomy, and physiology of selected representative specimens. Laboratory experiments and activities to accompany ZOO2010. Dissection of animals is a component of this course.

Total Contact Hrs: 32.00

Lab Hrs: 32.00

Fees: LABORATORY FEE \$22.00

Complete all the courses in the following option:

- Pre or Corequisite: ZOO2010 (minimum grade: C)

## ZOO4234 GENERAL PARASITOLOGY (3.00 Credits)

General Parasitology covers the biology of eukaryotic parasites with emphasis on species of medical and veterinary importance. Students will learn about basic principles and concepts in parasitology and will examine the systematics, morphology, life histories, pathogenesis, epidemiology, and control of parasitic protozoa, flatworms, nematodes, and arthropods. Corequisite: ZOO4234L. Prerequisites: BSC2010, BSC2011 (or ZOO2010), or permission of instructor.

Total Contact Hrs: 48.00

Lecture Hrs: 48.00

Complete all the courses in one of the following options:

- Option 1 - Prerequisite: BSC2010 (minimum grade: C) and BSC2011 (minimum grade: C)
- Option 2 - Prerequisite: ZOO2010 (minimum grade: C)
- Option 3 - Prerequisite: MCB2010 (minimum grade: C)

## ZOO4234L GENERAL PARASITOLOGY LAB (1.00 Credits)

General Parasitology Lab is designed to accompany General Parasitology. Students will learn to recognize parasitic protozoa, flatworms, roundworms, and arthropods and be able to describe their morphology. They also learn techniques for the collection and preservation of eukaryotic parasites.

Corequisite: ZOO 4234. Prerequisites: BSC 2010, BSC 2011 (or ZOO 2010), or permission of instructor. Credit Hours: 1

Total Contact Hrs: 48.00

Lab Hrs: 48.00

Fees: LABORATORY FEE \$113.00, LABORATORY FEE \$113.00

Complete all the courses in the following option:

- Option 1 - Prerequisite: BSC2010 (minimum grade: C), Corequisite: ZOO4234

## ZOO4713 COMPARATIVE VERTEBRATE ANATOMY & PHYSIOLOGY (3.00 Credits)

This course is designed to familiarize the student with morphological and anatomical features of vertebrates from a comparative evolutionary perspective. The course starts with an introduction to the comparative method, including evolutionary concepts such as homology and homoplasy. The underlying biology of tissue-organ systems and evolutionary perspectives on the origin, maintenance, and diversification of form among the vertebrates will be discussed. The remainder of the course will be an overview of major organ systems, interspersed with discussion of particular vertebrate phenomenon that highlight the development, function and/or evolution of these organ systems.

Total Contact Hrs: 48.00

Lecture Hrs: 48.00

Complete all the courses in the following option:

- Pre or Corequisite: ZOO4713L (minimum grade: C)

ZOO4713L COMPARATIVE VERTEBRATE MORPHOLOGY AND PHYSIOLOGY LAB (1.00 Credits)

The course is the accompanying laboratory course to ZOO4713. The 3 hours of laboratory per week complements the lecture topics which include evolutionary relationships among the vertebrate groups, and a comparison of major physiological systems; nerve, muscle, respiration, circulation, osmoregulation, excretion, temperature regulation and energy metabolism.

Total Contact Hrs: 48.00

Lab Hrs: 48.00

Fees: LABORATORY FEE \$4.00

Complete all the courses in the following option:

- Pre or Corequisite: ZOO4713 (minimum grade: C)