

Course Descriptions

Biological Science

BISI 1114 General Biology

An introduction to the fundamental concepts and principles of molecular and cellular biology with emphasis on morphological and physiological processes of the plant and animal kingdom. Appropriate laboratory work and demonstrations to implement the fundamental principles and concepts learned in theory. (Meets general education Biological Science requirement.)

BISI 1214 Introduction to Environmental Science

An introduction to basic principles and concepts of ecology. Special emphasis on current environmental problems and control measures. Appropriate laboratory work and demonstrations to implement the fundamental principles and concepts learned in theory. (Meets general education Biological Science requirement.)

BISI 1314 General Botany

Introduction to plant growth, development, and reproduction from molecular, cellular, physiologic and anatomical aspects. Genetics, classification and economical and environmental aspects will be surveyed. Laboratory covers theory principles. Offered spring semester only. (Meets general education Biological Science requirement.)

BISI 1414 General Zoology

An introduction to biological principles and concepts as related to animal sciences with emphasis on structure, function and evolution of animals—invertebrate and vertebrate forms. A brief survey of animal classification based on embryological, physiological, ecological and genetic evolutionary developments. Laboratory applies principles and concepts learned in theory. (Meets general education Biological Science requirement.)

BISI 2024 Entomology

Basic structure, function, and classification of insects and closely related animals. Coverage of insects in ecosystems and development of control programs that reduce reliance on chemical pesticides, including Integrated Pest Management. Lab will include identification and labeling of insects, and the procurement of an insect collection representing major orders. Prerequisites: BISI 1114 General Biology or BISI 1414 General Zoology.

BISI 2104 Human Anatomy

An introduction to the areas and microscopic structure of the various organ systems of the human body; covers tissue and following organ systems; integumentary, skeletal, muscular, nervous, digestive, cardiovascular, respiratory, lymphatic, urinary and reproductive. Lab required. Prerequisite: Previous biological science or CHEM 1314 Chemistry I. (Meets general education Biological Science requirement.)

BISI 2124 Microbiology

A survey of the Monera, Protist and Fungal Kingdoms, with emphasis on their morphology, physiology, immunology, and disease aspects. Laboratory to emphasize techniques of staining, culturing and identification of pathogenic and nonpathogenic organisms. Designed for students in the pre-professional, paraprofessional and health occupation areas. Prerequisites: Previous biological science course with laboratory, CHEM 1314 Chemistry I or concurrent enrollment. (Meets general education Biological Science requirement.)

BISI 2204 Human Physiology

An introduction to the cellular and gross functions of the various organ systems of the human body; covers cellular metabolism and the physiology of the following organ systems; skeletal, muscular, nervous, digestive, cardiovascular, respiratory, lymphatic, urinary, and reproductive. Lab required. Prerequisite: CHEM 1314 Chemistry I or any previous biological science. (Meets general education Biological Science requirement.)

BISI 2214 Human Anatomy and Physiology

An introduction to the physiological principles and concepts as related to the human body. A course designed for students in the fields of physical education, nursing, and related pre-professional areas. Laboratory designed to emphasize principles and concepts learned. Prerequisites: Previous biological science course with laboratory, CHEM 1314 Chemistry I or concurrent enrollment. (Meets general

education Biological Science requirement.)

BISI 2324 Comparative Vertebrate Anatomy

An investigation of early development, phylogeny, anatomy, morphology, and evolution of vertebrates, including laboratory studies involving extensive vertebrate dissections. Prerequisites: BISI 1414 General Zoology.

BISI 2403 Introduction to Wildlife Conservation

A survey course on the many aspects of wildlife conservation. Principles of conservation and management, ecology, mathematical modeling, law enforcement, endangered species preservation, genetic diversity conservation, predator management, and inter-governmental agencies relationships are emphasized. Required field trips. Prerequisites: BISI 1414 General Zoology or BISI 1314 General Botany.

BISI 2450 Supervised Study in Biology

Independent study course in the biological sciences for specific and advanced fields of study that utilize one or more components of the scientific method in conducting field or laboratory research: literature review, development of methodologies, data collection, data analysis, the writing of a report/scientific paper, and/or giving a presentation. Consent of instructor required. Credit 1 to 3 hours.

BISI 2460 Internship in Biology