

BIOLOGY (BI)

BI 101: General Biology (4)

A non-majors course designed to provide students with the scientific principles that describe and explain life processes and living systems. Laboratory experiences reinforce principles and concepts covered in class. Note that the order of topic presentation in this sequence may not match the order at other institutions. Please see an advisor. BI 101: This course focuses on the principles of evolution, natural selection and speciation, origin of life, diversity of life, classification and diversity of groups of organisms including viruses, bacteria, protists, fungi, plants and animals; principles of ecology, including populations, communities, ecosystems, and the biosphere, and animal behavior

Terms Typically Offered: Fall

BI 102: General Biology (4)

A non-majors course designed to provide students with the scientific principles that describe and explain life processes and living systems. Laboratory experiences reinforce principles and concepts covered in class. Note that the order of topic presentation in this sequence may not match the order at other institutions. Please see an advisor. BI 102: This course focuses on plant structure and function, with emphasis on flowering plants; animal structure and function, with emphasis on human biology

Terms Typically Offered: Winter

BI 103: General Biology (4)

A non-majors course designed to provide students with the scientific principles that describe and explain life processes and living systems. Laboratory experiences reinforce principles and concepts covered in class. Note that the order of topic presentation in this sequence may not match the order at other institutions. Please see an advisor. BI 103: Chemistry of life; cell structure, function, metabolism, division; heredity and molecular genetics

Terms Typically Offered: Spring

BI 221Z: Principles of Biology-Cells (5)

Explores fundamental biological concepts and theories about the cellular and molecular basis of life including cell structure and function, metabolism, genetic basis of inheritance and how information flows from DNA to proteins, with a focus on the iterative process of science.

Intended for science majors

Terms Typically Offered: Fall

BI 222Z: Principles of Bio-Organisms (5)

Explores fundamental biological concepts and theories about the structure and function of diverse organisms (including plants and animals), evolution and development, transformation of energy and matter, and body systems at a multicellular organismal level. Intended for science majors

Terms Typically Offered: Winter

BI 223Z: Principles of Bio-Eco and Evo (5)

Explores the unity and diversity of life through evolutionary mechanisms and relationships, and adaptation to the environment. Examines population, community, and ecosystem ecology. Intended for science majors

Terms Typically Offered: Spring

BI 231: Anatomy and Physiology I (4)

An introductory course on the structure and function of the various systems in the human body. Designed to meet the needs of nursing students and students in other allied health programs. This course will cover the organization of the body, homeostasis, cell biology tissues, integument, the skeletal system and the muscular system. BI 231, 232, 233 must be taken in sequence or with consent of instructor. This course focuses on organization of the body, homeostasis, cell biology, tissues, integument, the skeletal system, the muscular system.

Registration-Enforced Prerequisite: CH 104 or CH 112.

Terms Typically Offered: Fall, Winter

BI 232: Anatomy and Physiology II (4)

An introductory course on the structure and function of the various systems in the human body. Designed to meet the needs of nursing students and students in other allied health programs. This course covers the organization of the body, homeostasis, cell biology, tissues, integument, the skeletal system and the muscular system. BI 231, 232 and 233 must be taken in sequence or with consent of instructor. BI 232: This course focuses on the nervous system, special senses, endocrine system, blood and cardiovascular system.

Registration-Enforced Prerequisite: BI 231.

Terms Typically Offered: Winter, Spring

BI 233: Anatomy and Physiology III (4)

An introductory course on the structure and function of the various systems in the human body. Designed to meet the needs of nursing students and students in other allied health programs. This course covers the organization of the body, homeostasis, cell biology, tissues, integument, the skeletal system and the muscular system. BI 231, 232 and 233 must be taken in sequence or with consent of instructor. BI 233: This course focuses on the lymphatic system, immune system, respiratory system, digestive system, nutrition, metabolism, urinary system, reproductive systems, genetics.

Registration-Enforced Prerequisite: BI 232.

Terms Typically Offered: Spring, Summer

BI 234: Microbiology (4)

Structure, physiology, metabolism, genetics, growth and control of prokaryotes, eukaryotes, and viruses; human disease, immunity and disease agents; the role of microorganisms in nature. Laboratories emphasize aseptic techniques, microscopic observation, metabolic differentiation and identification of bacteria.

Registration-Enforced Prerequisite: CH 104, CH 112 or CH 221, previous course in biology recommended.

Terms Typically Offered: Fall, Winter, Spring, Summer

BI 242: Introduction to Genetics (3)

This course focuses on the laws and theories of heredity with emphasis on humans. It will include the study of cell division and gamete formation, patterns of inheritance, the structure and function of genes, the effects of genetic and chromosomal mutations, population genetics, the genetics of immunity and cancer, and the use of current biotechnology to further our understanding of disease, prevention, and possible therapies

Terms Typically Offered: Fall, Winter, Spring, Summer