

BIOLOGY (BIOL)

◆BIOL 1322

Nutrition and Diet Therapy

CRT HRS:3 LEC HRS:3 LAB HRS:0 OTH HRS:0
This is a study of the chemical, physical and sensory properties of food, nutritional quality, and food use and diet applications.
Prerequisite: None.

◆BIOL 1406

Biology for Science Majors I

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0
This is an in-depth study of the fundamental principles of living organisms including physical and chemical properties of life, cellular organization and function. Concepts of metabolic pathways, cellular respiration, photosynthesis, mitosis, meiosis, and molecular biology of the gene, genetics biotechnology, evolutionary adaptation and the scientific method are included.
Prerequisite: TSI Complete in Reading.

◆BIOL 1407

Biology for Science Majors II

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0
This is a continuation of Biology 1406. It is an in-depth study of the fundamental principles of living organisms including classification and evolution. Topics include biodiversity of viruses, bacteria, archaea, protists, fungi, plants, and animals, comparison of the organization, function and reproduction, ecology of behavior, populations, communities, and the biosphere.
Prerequisite: BIOL 1406 with a grade of "C" or better.

◆BIOL 1408

Biology for Non-Science Majors I

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0
This is an overview of the fundamental principles of living organisms including physical and chemical properties of life, cellular organization and function. Concepts of metabolic pathways, cellular respiration, photosynthesis, mitosis, meiosis, and molecular biology of the gene, genetics, biotechnology, evolutionary adaptation and the scientific method are included.
Prerequisite: TSI Complete in Reading.

◆BIOL 1409

Biology for Non-Science Majors II

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0
This is a continuation of Biology 1408. It is an overview of the fundamental principles of living organisms including classification and evolution. Topics include biodiversity of viruses, bacteria, archaea, protists, fungi, plants, and animals, comparison of their organization, function and reproduction with humans, and ecology of behavior, populations, communities, and the biosphere, including effects of human activities.
Prerequisite: BIOL 1408 with a grade of "C" or better.

◆BIOL 2389

Academic Cooperative in the Biological Life Sciences

CRT HRS:3 LEC HRS:3 LAB HRS:0 OTH HRS:0
This is an instructional program designed to integrate on-campus study with practical hands-on work experience in the biological sciences/life sciences. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of living organisms and their systems.
Prerequisite: Permission from the department.

◆BIOL 2401

Anatomy and Physiology I

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0
This is a study of the structure and function of the human body including cells, tissues, and organs of the following systems: integumentary, skeletal, muscular and nervous systems.
Prerequisite: TSI Complete in Reading.

◆BIOL 2402

Anatomy and Physiology II

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0
This is a continuation of the study of the structure and function of the human body including the circulatory, respiratory, digestive, urinary, reproductive, and endocrine systems. Consideration is given to metabolism, electrolyte and fluid balance, and human development.
Prerequisite: BIOL 2401 with a grade of "C" or better.

◆BIOL 2406

Environmental Biology

CRT HRS:4 LEC HRS:3 LAB HRS:2 OTH HRS:0
This is a study of human interaction and the effect upon plant and animal communities. Conservation, pollution, energy and other contemporary ecological problems will be discussed.
Prerequisite: None.

◆BIOL 2416

Genetics

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0
This is a study of the principles of molecular and classical genetics and the function and transmission of hereditary material. It includes population genetics and genetic engineering.
Prerequisite: BIOL 1406 and CHEM 1411 with a grade of "C" or better.

◆BIOL 2420

Microbiology for Non-Science Majors

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0
This course is an introduction to the morphology, physiology and taxonomy of pathogenic microorganisms. In this course, students will be presented with basic knowledge about the discipline of microbiology, the study of disease transmission, resistance to infection, microbial control and a brief review of food microbes, public health and immunology. Emphasis will include methods for studying microbes, metabolism, growth, epidemiology, pathogenesis, and infectious diseases. Laboratory exercises will provide students with hands-on experience in studying microbiological applications and sound techniques in culturing, staining and identifying bacteria.
Prerequisite: BIOL 2402 with a grade of "C" or better.

◆BIOL 2421

Microbiology for Science Majors

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0
This is a study of principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts and the environment. Laboratory activities will reinforce principles of microbiology as well as the microbial interactions including all of the principles and microbial interactions covered in the lecture sessions.
Prerequisite: BIOL 1406, BIOL 1407 and CHEM 1411 with a grade of "C" or better.