

BIOLOGY (BIO)

BIO-101 HUMAN BIOLOGY

3 credit hours, 5 contact hours (3 Lecture/2 Lab Hours Per Week)

This course involves the study of the structure and function of the normal human body and the practices necessary to maintain normal health. Medical terminology, disease process and treatments are studied. *3 credit hours/5 billed contact hours*

Requisite(s): Placement beyond or satisfactory completion of ENG-073.

Fee: \$50.00

BIO-110 BIOLOGICAL FORM AND FUNCTION

3 credit hours, 3 contact hours (3 Lecture Hours Per Week)

The course covers basic concepts of anatomy and physiology of plants and animals. By the end of this non-lab course students will be able to understand the language of anatomy and physiology used to describe the functions of plants and animals. It also introduces students to the role of organ systems in maintaining homeostasis in plants and animals. By the end of this course the student will also understand the common set of functional features that all living systems contain.

Requisite(s): Must complete one year of high school biology or BIO-120

BIO-120 INTRODUCTION TO BIOLOGY

4 credit hours, 5 contact hours (3 Lecture/2 Lab Hours Per Week)

An introductory survey course covering the major principles and unifying theories of biology. This course will provide the beginning student with a basic understanding of biological principles encompassing basic biochemistry, cell biology, cell division, genetics, diversity and evolution and ecology. This is a lecture/laboratory combination course and is designed to meet the needs of students with limited science background. *4 credit hours/5 billed contact hours*

Requisite(s): Placement beyond or satisfactory completion of ENG-073

Fee: \$60.00

BIO-121 MOLECULAR AND CELLULAR BIOLOGY

4 credit hours, 5 contact hours (3 Lecture/2 Lab Hours Per Week)

A general study of the principles and processes of biology and the nature of biological investigation, with emphasis on cellular biology, respiration, photosynthesis, and genetics. This course, together with NSB 122 provides a basic background for further work in the biological sciences. *4 credit hours/5 billed contact hours*

Requisite(s): Placement beyond or satisfactory completion of ENG-073 and MATH 084.

Fee: \$60.00

BIO-122 ORGANISMAL BIOLOGY

4 credit hours, 5 contact hours (3 Lecture/2 Lab Hours Per Week)

A general study of the principles and processes of biology and the nature of biological investigation, with emphasis on evolution, speciation, ecology and the diversity of life (includes taxonomy and classifications of organisms). Laboratory investigations coordinated with lecture topics. *4 credit hours/5 billed contact hours*

Requisite(s): MATH 100 or higher, BIO 120 or 1 year of high school biology recommended

Fee: \$60.00

BIO-125 ENVIRONMENT AND SOCIETY

3 credit hours, 3 contact hours (3 Lecture Hours Per Week)

Designed for students who plan on pursuing a higher degree. This course is an introduction to environmental studies through a survey of environmental topics in which the student will explore human relationships with the environment and the resulting changes. Students will also examine the different approaches used to understand and solve environmental problems facing us today. The course is reading and writing intensive, requiring a written research paper using credible scientific journals as source information.

Requisite(s): Placement beyond or satisfactory completion of ENG-073

BIO-210 HUMAN ANATOMY & PHYSIOLOGY I

4 credit hours, 6 contact hours (3 Lecture/3 Lab Hours Per Week)

This is the first in a sequence of two intensive anatomy and physiology courses intending to cover the human body as an integrated whole by examining the structures and functions of each body system as well as some of the common diseases associated with each system. Integration of the body's systems is emphasized by examining how each of these systems interacts with the body's other systems in order to maintain homeostasis. Laboratory activities will include dissections, computer labs, anatomical models, and brief scientific experimentation. Study within this course includes general chemistry principles, biochemistry, cells, tissues, and the following systems: integumentary, skeletal, muscular, nervous, special senses, and endocrine. It is recommended, but not required, that students take Medical Terminology before or along with this class as this can help students absorb the large amount of new terminology associated with Anatomy & Physiology. *4 credit hours/6 billed contact hours*

Requisite(s): 1. Placement beyond or satisfactory completion of ENG-073
2. Successful completion (grade of 2.0 or better) of BIO-120 or BIO-121 or CHEM-130. 3. Successful completion of High School biology with a 3.0 grade or better within the last 5-years. 4. Successful completion of High School chemistry with a 3.0 grade or better within the last 5 years. BIO 121 with a 2.0 or better is strongly recommended.

Fee: \$50.00

BIO-211 HUMAN ANATOMY & PHYSIOLOGY II

4 credit hours, 6 contact hours (3 Lecture/3 Lab Hours Per Week)

This is the second in a sequence of two intensive anatomy and physiology courses intending to cover the human body as an integrated whole by examining the structures and functions of each body system as well as some of the common diseases associated with each system. Integration of the body's systems is emphasized by examining how each of these systems interacts with the body's other systems in order to maintain homeostasis. Laboratory activities will include dissections, computer labs, anatomical models, and brief scientific experimentation. Study within this course includes the following body systems: cardiovascular (including blood), lymphatic and immune, respiratory, digestive, urinary, and reproductive. *4 credit hours/6 billed contact hours*

Requisite(s): Successful completion (grade 2.0 or better) of BIO-210
Fee: \$50.00

BIO-230 MICROBIOLOGY

4 credit hours, 6 contact hours (3 Lecture/3 Lab Hours Per Week)

This is an introduction to general microbiology. Topics include general properties of bacteria and fungi, disinfection, sterilization, sources and means of infection, infectious diseases and immunity. This is a lecture/laboratory combination course. In the laboratory, students will prepare culture media, isolate and propagate and study morphological and physiological characteristics of both pathogens and non-pathogens. *4 credit hours/6 billed contact hours*

Requisite(s): Must complete BIO-121 and CHEM-130 with a grade of 2.0 or better

Fee: \$60.00

BIO-275 BIOLOGY RESEARCH PROJECT

2 credit hours, 2 contact hours (2 Lecture Hours Per Week)

The Biology Research Project is a capstone experience in Biology for the student seeking an Associate of Science Degree. In this course the student will work with an instructor to design and conduct an experiment or investigation. The course will allow the student to bring together their college course experiences in science, mathematics and communications while pursuing advanced work in an area of their own interest. The evaluation of the student will be determined by the instructor, the Science Department and the Dean of Teaching & Learning.

Requisite(s): Placement beyond or satisfactory completion of ENG-073 and permission of instructor