

# BIOLOGY (BIOL)

## BIOL 1011, General Biology Lab I (1 Credit Hour)

*0 lecture hours per week, 2 lab hours per week, 2 contact hours per week*

This course provides a laboratory component that coincides with the BIOL 1013 lecture course. The topics covered in this course follow the sequence of material in the BIOL 1013 course. This course requires a lab fee.

**Prerequisite(s):** BIOL 1013\* or 1010.

\* May be taken concurrently.

## BIOL 1013, General Biology I (3 Credit Hours)

*3 lecture hours per week, 0 lab hours per week, 3 contact hours per week*

This course covers the concepts in cell biology, genetics, ecology, and evolution. This course requires a fee for course materials.

## BIOL 1021, General Biology Lab II (1 Credit Hour)

*0 lecture hours per week, 2 lab hours per week, 2 contact hours per week*

This course provides a laboratory component that coincides with the BIOL 1023 lecture course. The topics covered in this course follow the sequence of material in the BIOL 1023 course. This course requires a lab fee.

**Prerequisite(s):** BIOL 1023\* or 1020.

\* May be taken concurrently.

## BIOL 1023, General Biology II (3 Credit Hours)

*3 lecture hours per week, 0 lab hours per week, 3 contact hours per week*

This course covers the concepts of biological diversity, physiology, and behavior of living organisms. This course requires a fee for course materials.

**Prerequisite(s):** BIOL 1013 or 1010.

## BIOL 1031, Principles of Biology Lab I (1 Credit Hour)

*0 lecture hours per week, 3 lab hours per week, 3 contact hours per week*

This course provides a laboratory component that enhances and follows the sequence of material in BIOL 1033. Includes hands-on and virtual lab experience. This course requires a lab fee.

**Prerequisite(s):** BIOL 1033\* or 1201.

\* May be taken concurrently.

## BIOL 1033, Principles of Biology I (3 Credit Hours)

*3 lecture hours per week, 0 lab hours per week, 3 contact hours per week*

This course is designed for students majoring in science or a related field. Principles of biology from the cellular to the ecosystem level, including biochemistry, cell biology, molecular biology, genetics, and evolution. This course requires a fee for course materials.

**Prerequisite(s):** minimum score of 18 in 'ACT English', minimum score of 250 in 'ACCUPLACER NG Writing', ENGL 0099, 1010, 1020, 1013 or 1023.

## BIOL 1041, Principles of Biology Lab II (1 Credit Hour)

*0 lecture hours per week, 3 lab hours per week, 3 contact hours per week*

This course provides a laboratory component that enhances and follows the sequence of material in BIOL 1043. Students perform an array of dissections from the earthworm to the fetal pig. Includes hands-on and virtual lab experience. This course requires a lab fee.

**Prerequisite(s):** (BIOL 1033 or 1201) and (BIOL 1043\* or 1202).

\* May be taken concurrently.

## BIOL 1043, Principles of Biology II (3 Credit Hours)

*3 lecture hours per week, 0 lab hours per week, 3 contact hours per week*

This course is designed for students majoring in science or a related field.

A systematic study of the structure, function, ecology and evolution of organisms including bacteria, protists, fungi, plants, and animals. This course requires a fee for course materials.

**Prerequisite(s):** BIOL 1033 or 1201.

## BIOL 2083, Fundamentals of Biochemistry (3 Credit Hours)

*3 lecture hours per week, 3 contact hours per week*

Introduces the chemistry of biological systems, focusing on the integration of concepts from general, inorganic, and biochemistry and their application to living systems. Covers the structure and function of biological molecules as well as the chemistry of heredity, metabolism, and biological energy. Special topics are discussed as time and interest permits.

**Prerequisite(s):** (BIOL 1201 or 1033) and (CHEM 1010 or 1023).

## BIOL 2121, General Microbiology Lab (1 Credit Hour)

*0 lecture hours per week, 3 lab hours per week, 3 contact hours per week*

A survey of laboratory techniques in microbiology applicable to general microbiology, public health microbiology, medical technology, and medicine. This course requires a lab fee.

**Prerequisite(s):** BIOL 2123\* or 2110.

\* May be taken concurrently.

## BIOL 2123, General Microbiology (3 Credit Hours)

*3 lecture hours per week, 0 lab hours per week, 3 contact hours per week*

A basic study of microorganisms with emphasis on those of medical significance and their role in public health and infectious disease. This course requires a fee for course materials.

**Prerequisite(s):** BIOL 1033 or 1201.

## BIOL 2211, Hum Anat & Physiology Lab I (1 Credit Hour)

*0 lecture hours per week, 3 lab hours per week, 3 contact hours per week*

A laboratory course to accompany BIOL 2213 using specimens, models, and instruments to investigate the structure and function of the human body. This course requires a lab fee.

**Prerequisite(s):** BIOL 2213\* or 2500.

\* May be taken concurrently.

## BIOL 2213, Hum Anat & Physiology I (3 Credit Hours)

*3 lecture hours per week, 0 lab hours per week, 3 contact hours per week*

A descriptive presentation of the structure and function of the organ systems of the human body covering cells, tissues, bones, muscles, nervous system. This course requires a fee for course materials.

**Prerequisite(s):** BIOL 1033 or 1201.

## BIOL 2221, Hum Anat & Physiology Lab II (1 Credit Hour)

*0 lecture hours per week, 3 lab hours per week, 3 contact hours per week*

A laboratory course to accompany BIOL 2223 using specimens, models, and instruments to investigate the structure and function of the human body. This course requires a lab fee.

**Prerequisite(s):** BIOL 2223\* or 2510.

\* May be taken concurrently.

## BIOL 2223, Hum Anat & Physiology II (3 Credit Hours)

*3 lecture hours per week, 0 lab hours per week, 3 contact hours per week*

A descriptive presentation of the structure and function of the organ systems of the human body covering the endocrine, cardiovascular, immune, respiratory, digestive, excretory, and reproductive systems. This course requires a fee for course materials.

**Prerequisite(s):** BIOL 2213 or 2500.

**BIOL 2304, Forensic Biology (4 Credit Hours)**

*3 lecture hours per week, 3 lab hours per week, 6 contact hours per week*

Introduces general criminalistics and the biological aspects of forensic evidence. Emphasis is placed on the theory and techniques of biological principles applied to forensic science, such as the use of DNA analysis. Discusses the identification, analysis, and interpretation of biological evidence in forensic contexts. The course includes a laboratory component with exercises commonly practiced in criminalistics and forensic biology.

**Prerequisite(s):** (BIOL 1201 or 1033) and (BIOL 1031 or 1203) and (BIOL 1202 or 1043) and (BIOL 1204 or 1041).

**BIOL 2703, Fund of Human Nutrition (3 Credit Hours)**

*3 lecture hours per week, 0 lab hours per week, 3 contact hours per week*

This course examines the chemistry of the basic nutrients, metabolic pathways, and factors affecting utilization, food sources, dietary allowances, food habits and special needs. It includes dietary calculations, evaluation, and current issues in nutrition.

**Prerequisite(s):** BIOL 1013, 1010, 1033 or 1201.

**BIOL 2833, Introduction to Marine Biology (3 Credit Hours)**

*3 lecture hours per week, 0 lab hours per week, 3 contact hours per week*

The diversity of marine organisms, their interactions, and their environments.

**Prerequisite(s):** BIOL 1201 or 1033.

**BIOL 2993, Forensic Science Externship (3 Credit Hours)**

*1 lecture hours per week, 6 lab hours per week, 7 contact hours per week*

Designed to promote career awareness and opportunities for students to participate in experiential learning activities via independent study and supervised field experience related to a professional area or field of forensic science.

**Prerequisite(s):** CRJU 2093 and BIOL 2304.