

Biology

BIOL 101 (0401) Biology

Reading Placement Test Level: College Reading

Prerequisite: None

Credit Hours: 3

This course presents a study of the basic concepts of living matter with emphasis on cells, tissue, and organism structure and function. An evolutionary approach with emphasis on classification, inheritance, and the ecology of plants and animals is used. This course is intended for students whose concentration is other than biology, with emphasis on knowledge of the scientific method of the chemical component of living organism and the fundamental relationship between animals and plants.

BIOL 108 (0422) Principles and Concepts of Genetics (IO)

Reading Placement Test Level: College Reading

Prerequisite: None

Credit Hours: 3

Mendelian and physical basis of inheritance, development, population genetics, medical genetics, chemical basis of heredity, and current issues in human and medical genetics.

BIOL 120 (0431) Biology

Reading Placement Test Level: College Reading

Prerequisite: None

Credit Hours: 5

This course presents a study of the basic concepts of living organisms using an evolutionary approach with emphasis on classification, inheritance, and the ecology of plants and animals. This course is intended for students whose concentration is biology and related disciplines with emphasis on knowledge of the scientific method and the chemical components and functions of cells, and tissues and organisms' structure and function. Laboratory exercises are designed to emphasize and support the course concepts and stress the scientific method of investigation.

BIOL 122 (0404) Environmental Life Science w/Lab

Prerequisite: None

Credit Hours: 5

This general education course provides an overview of life science which includes general biology and general ecology topics. This class is directed toward elementary education majors and to provide these majors with a comprehensive exposure to biology, as well as experiments and investigations that can be safely carried out in the elementary classroom. This course will not fulfill any requirements for biology majors; it will fulfill life science requirement for non-biology majors only. This 5 hour course includes 2 hours of lab and requires students to document their lab work and experiences through the use of a paper file system or the computer.

BIOL 124 (0402) General Botany

Prerequisite: None

Credit Hours: 5

A study of plant growth, physiology, morphology, reproduction, taxonomy, and evolution. This course is open to anyone interested; however, it is directed toward students with a biology concentration. Laboratory exercises accompany lectures.

BIOL 126 (0407) General Zoology

Prerequisite: None

Credit Hours: 5

Fundamental principles and processes of animal life including relationships, morphology, life history, ecology, genetics, and evolution. This course is open to anyone interested; however, it is directed toward students with a biology concentration. Laboratory exercises accompany lecture.

BIOL 130 (0412) Anatomy and Physiology

Reading Placement Test Level: College Reading

Recommended Prerequisite: High School Biology with an A or B, BIOL 101 Biology (3 credit hour) **or** BIOL 120 Biology (5 credit hour)

Credit Hours: 5

Anatomy and Physiology is the study of the structure and function of different systems of the human body.

The course covers functional anatomy with emphasis on basic principles and physiological activities of different systems of the body. The laboratory is designed to provide hands-on study of the organisms/organ systems studied in the lecture portion of the course. Cat dissection is a mandatory and important portion of the laboratory study. This course meets the requirements of the students interested in nursing, respiratory therapy, radiography, physical education, biology, and other allied health courses.

BIOL 140 (0426) Independent Study in Biology (IO)

Prerequisite: Must contact instructor before enrolling, BIOL 101 Biology (3 credit hours) **or** permission of instructor

Credit Hours: 3

Independent study in specialized areas of biology for the individual student. May be repeated for credit not to exceed 3 hours.

BIOL 145 (0413) Case Histories in Anatomy and Physiology

Prerequisite: Completed College Anatomy and Physiology or currently be enrolled in 130 Anatomy and Physiology

Credit Hours: 1

This course is to provide an applied review of Anatomy and Physiology by using case histories of diseases. It will require the student to integrate the body systems and apply their knowledge of normal anatomy and physiology. This course is designed for health science majors, especially those interested in direct patient care, and is also a recommended elective for those desiring increased experience with anatomy and physiology or pathophysiology. The class will be presented by case histories of major disease processes. By the end of the class, all body systems will have been reviewed. Students will be required to interact with each other in small groups as well as with the instructor, and make presentations in class.

BIOL 201 (0411) Microbiology

Reading Placement Test Level: College Reading

Recommended as a Prerequisite: BIOL 101 Biology (3 credit hour) **or** BIOL 120 Biology (5 credit hour) or BIOL 130 Anatomy & Physiology (5 credit hour)

Credit Hours: 5

This course presents a study of microorganisms and their morphological, physiological, and biochemical characteristic response to the environment as well as their influence on the surroundings. Their relationship to the anatomy and physiology of the human body, aspects of parasitism, infection state, body defenses, and methods of control and prevention of infections will also be studied. Laboratory experiments will be conducted relating to bacterial growth, isolation and pure culture techniques as well as physiological characteristics of different microorganisms.

Reading Essentials Placement Scores: ACT 0-12, COMPASS 0-54

College Reading Placement Scores: ACT 13-16, COMPASS 55-74

No Reading Course Required Placement Scores: ACT 17 or Higher, COMPASS 75 or higher

IO = Infrequently Offered Course