

# BIOLOGY (BI)

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## **BI101 General Biology** 4 credits (3 lec, 3 lab hrs/wk)

An introductory course in the principles and methods of biology, intended for majors in fields other than the biological sciences. Topics include cell chemistry, structure, and metabolism, as well as cell reproduction, chromosomes, and Mendelian genetics. Unifying themes include evolution and applications to human health.

This course may be taken 1 time for credit.

Course classification: LDC

## **BI102 General Biology** 4 credits (3 lec, 3 lab hrs/wk)

An introductory course in the principles and methods of biology, intended for majors in fields other than the biological sciences. Topics include molecular genetics and biotechnology, evolutionary mechanisms, population biology, and diversity of life (viruses, bacteria, protists, and animals).

This course may be taken 1 time for credit.

Course classification: LDC

## **BI103 General Biology** 4 credits (3 lec, 3 lab hrs/wk)

An introductory course in the principles and methods of biology, intended for majors in fields other than the biological sciences. Topics will include an introduction to the anatomy and physiology of plants, fungi, and animals. Ecology and population biology principles will also be explored.

This course may be taken 1 time for credit.

Course classification: LDC

## **BI111 Marine Habitats of the Oregon Coast** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): ( MTH60 )

This course provides an introduction to marine habitats, the Oregon Institute of Marine Biology (OIMB), and the field of study for marine biology majors or other interested students. Low tide field trips are conducted to study animals and plants in their habitats. An introduction to courses and research conducted at OIMB is provided.

This course may be taken 1 time for credit.

Course classification: LDC

## **BI140 Practical Ecology** 3 credits (3 lec hrs/wk)

An introduction to the basic concepts of ecology, using examples from the ecology of the local area, with a consideration of impacts made by different types of land use.

This course may be taken 1 time for credit.

Course classification: LDC

## **BI142 Habitats: Marine Biology** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( MTH60 )

Examines the marine environment and the ecology, physiology, and morphology of marine plants and animals emphasizing Oregon. Laboratory focuses on environmental testing and identification.

This course may be taken 1 time for credit.

Course classification: LDC

## **BI149 Introduction to Human Genetics** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( MTH65 )

Covers the basic concepts of genetics as they have developed since the nineteenth century. Discusses current techniques that are being developed and applied to problems of inheritance patterns, genetic disorders, and genetic therapy. Behavior and population genetics are included.

This course may be taken 1 time for credit.

Course classification: LDC

## **BI180 Internship: Biology** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

## **BI201 Introductory Biology** 4 credits (3 lec, 3 lab hrs/wk)

For biological science majors in programs which will require students to complete a series in introductory biology. Topics include inorganic, organic, and biochemistry; cellular structure, chemistry, metabolism and reproduction; and Mendelian genetics.

This course may be taken 1 time for credit.

Course classification: LDC

## **BI202 Introductory Biology** 4 credits (3 lec, 3 lab hrs/wk)

For biological science majors in programs which will require students to complete a series in introductory biology. Topics include molecular genetics and biotechnology; evolutionary mechanisms and population genetics; and an introduction to the diversity of life.

This course may be taken 1 time for credit.

Course classification: LDC

## **BI203 Introductory Biology** 4 credits (3 lec, 3 lab hrs/wk)

For biological science majors in programs which will require students to complete a series in introductory biology. Topics include the anatomy and physiology of plants, animals, and fungi. Ecology, population biology and methods used in field studies will also be explored.

This course may be taken 1 time for credit.

Course classification: LDC

## **BI231 Human Anatomy and Physiology I** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( BI101 ) or ( BI201 ) or ( CHEM110 ) or ( CHEM223 )

The curriculum of the first term of Human Anatomy and Physiology will include the study of body organization, tissues, and a study of the integumentary, skeletal, and muscular systems. The course will include the study of molecules, cells, tissues, organs and organ systems in humans. Some pathological conditions will be covered.

This course may be taken 1 time for credit.

Course classification: LDC

## **BI232 Human Anatomy and Physiology II** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( BI231 )

The curriculum of the second term of Human Anatomy and Physiology will include the study of: The nervous system including nervous tissue, the spinal chord and spinal nerves, the brain and cranial nerves, sensory and motor and integrative nervous systems, the special senses and the autonomic nervous system; the endocrine system with emphasis on hormone activity, the major hormones of each gland, hormones involved in growth and the stress response; the cardiovascular system including blood, the heart, blood vessels and hemodynamics.

This course may be taken 1 time for credit.

Course classification: LDC

## **BI233 Human Anatomy and Physiology III** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( BI232 )

The curriculum of the third term of Human Anatomy and Physiology will include the study structure and function of the: Respiratory system; digestive system; metabolism; urinary system; fluid, electrolyte, and acid base balance; the reproductive system; and human development and inheritance.

This course may be taken 1 time for credit.

Course classification: LDC

**BI234 Microbiology** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( BI101 ) or ( BI201 ) or ( CHEM110 )

Microbiology principles are applied to health-related fields. Includes characteristics, physiology, and growth requirements of microorganisms, sterilization principles, infection, and immunity. Pathogenic microbes, infections and host resistance will be a consideration.

This course may be taken 1 time for credit.

Course classification: LDC

**BI280 CWE: Biology** 1-6 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical worksite exposure to applied science, which provides students an opportunity to explore potential career paths in science while gaining practical experience in applying classroom science theory.

This course may be taken 12 times for credit.

Course classification: LDC