

# COURSES

## BIOLOGY

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### **BIO-111          General Biology I**

**Lec 3   Lab 3   Clinic 0   Credit 4**

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, molecular and cellular biology, metabolism and energy transformation, genetics, evolution, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels.

**Co-Requisites:** None

**Pre-Requisites:** None

### **BIO-112          General Biology II**

**Lec 3   Lab 3   Clinic 0   Credit 4**

This course is a continuation of BIO 111. Emphasis is placed on organisms, evolution, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels.

**Co-Requisites:** None

**Pre-Requisites:** BIO-111

### **BIO-140          Environmental Biology**

**Lec 3   Lab 0   Clinic 0   Credit 3**

This course introduces environmental processes and the influence of human activities upon them. Topics include ecological concepts, population growth, natural resources, and a focus on current environmental problems from scientific, social, political, and economic perspectives. Upon completion, students should be able to demonstrate an understanding of environmental interrelationships and of contemporary environmental issues.

**Co-Requisites:** None

**Pre-Requisites:** None

### **BIO-140A        Environmental Biology Lab**

**Lec 0   Lab 3   Clinic 0   Credit 1**

This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues.

**Co-Requisites:** BIO-140

**Pre-Requisites:** None

### **BIO-160        Introductory Life Science**

**Lec 2   Lab 2   Clinic 0   Credit 3**

This course introduces scientific and biological concepts. Topics include basic chemistry, cell structure and function, cell division, basic genetic concepts, anatomical terminology, and metric-English measurements and conversions. Upon completion, students should be able to demonstrate an understanding of basic chemistry, cell biology, genetic concepts; anatomical terminology; and metric-English measurements and conversions.

**Co-Requisites:** None

**Pre-Requisites:** None

### **BIO-168        Anatomy and Physiology I**

**Lec 3   Lab 3   Clinic 0   Credit 4**

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, and nervous systems and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships.

**Co-Requisites:** None

**Pre-Requisites:** None

### **BIO-169        Anatomy and Physiology II**

**Lec 3   Lab 3   Clinic 0   Credit 4**

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships.

**Co-Requisites:** None

**Pre-Requisites:** BIO-168

**BIO-175      General Microbiology****Lec 2   Lab 2   Clinic 0   Credit 3**

This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques.

**Co-Requisites:** None**Pre-Requisites:** One: BIO-110, BIO-111, BIO-163, BIO-165, or BIO-168