

# 2022-2023 TTC Catalog - Biology (BIO)

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## BIO 001 - BIO 001

**Lec:** 0 **Lab:** 0 **Credit:** \*

Indicates credit given for biology course work transferred from another college for which there is no equivalent course at TTC. \*Hours vary depending on external course.

**Division:**

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## BIO 100 - Introductory Biology

**Lec:** 4.0 **Lab:** 0 **Credit:** 4.0

### Course Offered

Fall  
Spring  
Summer

This general biology course introduces the principles of biology.

**Grade Type:** Letter Grade

**Division:** Science and Mathematics

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## BIO 101 - Biological Science I

**Lec:** 3.0 **Lab:** 3.0 **Credit:** 4.0

### Course Offered

Fall  
Spring  
Summer

This course is a study of the scientific method, basic biochemistry, cell structure and function, cell physiology, cell reproduction and development, Mendelian genetics, population genetics, natural selection, evolution and ecology.

### Prerequisite

High school biology or high school chemistry,  
BIO 100

or successful completion of a college-level, lab-based science course within the last five years is strongly recommended.

**Grade Type:** Letter Grade

**Division:** Science and Mathematics

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## **BIO 102 - Biological Science II**

**Lec:** 3.0 **Lab:** 3.0 **Credit:** 4.0

### **Course Offered**

Fall

Spring

Summer

This course is a study of the classification of organisms and structural and functional considerations of all kingdoms (particularly major phyla as well as viruses). Vertebrate animals and vascular plants are emphasized.

### **Prerequisite**

BIO 101

with a grade of C or higher. The prerequisite for this course should have been completed within the last five years.

**Grade Type:** Letter Grade

**Division:** Science and Mathematics

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## **BIO 112 - Basic Anatomy and Physiology**

**Lec:** 3.0 **Lab:** 3.0 **Credit:** 4.0

### **Course Offered**

Fall

Spring

Summer

This course is a basic integrated study of the structure and function of the major systems of the human body. Labs complement the material presented in lecture.

**Grade Type:** Letter Grade

**Division:** Science and Mathematics

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## **BIO 115 - Basic Microbiology**

**Lec:** 2.0 **Lab:** 3.0 **Credit:** 3.0

### **Course Offered**

Fall

Summer

This general course in microbiology includes the study of epidemiology, ubiquity and control, and the identification of microorganisms.

High school biology or BIO 100 is recommended

**Grade Type:** Letter Grade

**Division:** Science and Mathematics

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## **BIO 210 - Anatomy and Physiology I**

**Lec:** 3.0 **Lab:** 3.0 **Credit:** 4.0

### **Course Offered**

Fall

Spring

Summer

The first part of a two-semester sequence, this comprehensive transfer course is a lecture and laboratory study with model and specimen dissections of the integrated structure and function of the human body. Basic cellular chemistry and the integumentary, skeletal, muscular, nervous and endocrine systems are presented. Cytology and histology are emphasized.

### **Prerequisite**

High school biology or high school chemistry,

BIO 100

or successful completion of a college-level, lab-based science course. The prerequisite for this course should have been completed within the last five years.

**Grade Type:** Letter Grade

**Division:** Science and Mathematics

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## **BIO 211 - Anatomy and Physiology II**

**Lec:** 3.0 **Lab:** 3.0 **Credit:** 4.0

### **Course Offered**

Fall

Spring

Summer

This course is a continuation of BIO 210 and includes the study of blood, heart, circulatory, lymphatic, respiratory, digestive, urinary and reproductive systems. Special senses, development and inheritance also are presented.

### **Prerequisite**

BIO 210

with a minimum grade of C

The prerequisite for this course should have been completed within the last five years.

**Grade Type:** Letter Grade

**Division:** Science and Mathematics

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## **BIO 225 - Microbiology**

**Lec:** 3.0 **Lab:** 3.0 **Credit:** 4.0

### **Course Offered**

Fall

Spring

Summer

This lecture and laboratory course introduces bacteria, protozoa, rickettsia, viruses, fungi and algae. The course emphasizes the morphology, physiology, genetics, identification, cultivation and control of microbes. A survey is made of pathogenic microorganisms, their effects on the human body and the immunology of the human body.

### **Prerequisite**

BIO 101

or

BIO 210

with a grade of C or higher

The prerequisite for this course should have been completed within the last five years.

**Grade Type:** Letter Grade

**Division:** Science and Mathematics

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## **BIO 238 - Musculoskeletal System Anatomy**

**Lec:** 2.0 **Lab:** 3.0 **Credit:** 3.0

### **Course Offered**

Fall

This course is a study of the muscular and skeletal systems with laboratory exercises on the bones, bone markings and the muscles, addressing their origin, insertion, innervation and action.

### **Prerequisite**

BIO 112

or

BIO 210

and

BIO 211

**Grade Type:** Letter Grade

**Division:** Science and Mathematics

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