

# Piedmont Technical College Course Syllabus

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## COURSE INFORMATION

**Course Prefix/Number:** BIO 101

**Title:** Biological Sciences I

**Responsible Division:** Arts and Sciences

**Last Day to Withdraw from this Course:** For the last date to withdraw from this course, consult the current *Student Calendar*.

### Course Description:

For course, credit hour, pre-requisite(s) and co-requisite(s) information, visit the Detailed Course Information page: [www.ptc.edu/courses/BIO101](http://www.ptc.edu/courses/BIO101).

### Textbook and Other Materials:

For textbook information and additional required and/or supplemental materials, visit the [college bookstore](http://www.ptc.edu/bookstore) (www.ptc.edu/bookstore).

### Proctored Examinations:

Proctored examinations for distance learning courses taken at non-PTC campuses may require a proctoring fee for each exam taken.

## COURSE POLICIES

Course policies are available online through the *Academic Catalog* and *Student Handbook*. Visit the [Course Policies page](http://www.ptc.edu/syllabus/policies) (www.ptc.edu/syllabus/policies) for a detailed list of important policies and more information.

## GRADE POLICY

Detailed grading policy information can be found on the [Grading Policy webpage](http://www.ptc.edu/grading-policy) (http://www.ptc.edu/grading-policy). Final grade appeal information is available in the [Academic Catalog](http://www.ptc.edu/catalog/) (http://www.ptc.edu/catalog/).

## **ACCOMMODATIONS**

### **Accommodations for ADA:**

Information is available on the [Student Disability Services webpage](http://www.ptc.edu/ada) (<http://www.ptc.edu/ada>).

## **TITLE IX HARASSMENT AND SEXUAL ASSAULT INFORMATION**

In accordance with Title IX of the Education Amendments of 1972, Piedmont Technical College does not discriminate on the basis of sex in its education programs or activities. Title IX protects students, employees, and applicants from sex discrimination in admissions and employment to include discrimination based on gender identity or failure to conform to stereotypical notions of masculinity or femininity. More information regarding Title IX, including contact information for the Title IX coordinators, is available at [Title IX Harassment and Sexual Assault Information](https://www.ptc.edu/about/legal-disclosures/title-ix-harassment-and-sexual-assault-information) (<https://www.ptc.edu/about/legal-disclosures/title-ix-harassment-and-sexual-assault-information>).

## **RATIONALE**

### **Why do I need this course?**

This course is designed to introduce basic concepts fundamental to all life forms. These topics include basic chemistry for biological sciences, cell theory, concepts of energy flow (respiration and photosynthesis), genetics (both classical and modern), evolution and ecology. The concept of homeostasis is defined but is not specifically covered in this course. The scientific method is presented as a mechanism for solving problems.

## **PROGRAM INFORMATION**

For program information including required courses, program learning outcomes, gainful employment information and advisement information, refer to the Academic Program webpage. Go to [Academics](http://www.ptc.edu/academics) (<http://www.ptc.edu/academics>), select your program, and then select Credentials Offered.

## **COURSE STUDENT LEARNING OUTCOMES**

Upon successful completion of this course and/or clinical, each student will be able to:

- Describe the fundamental chemical, structural and functional aspects of cells.
- Express the biological pathways for energy processing by cells (both photosynthesis and cellular respiration) and the essential role and function of enzymes in these processes.
- Explain and apply Mendelian rules of heredity.
- Describe the fundamental aspects of molecular genetics.
- List the scientifically accepted theories of evolution.
- Identify and describe ecology at the population, community and ecosystem levels.
- List and describe accepted theories of animal behavior

## **GENERAL EDUCATION COMPETENCIES**

### **Piedmont Technical College General Education Competencies for All Graduates:**

*This course may address one or more of the following General Education Competencies (assessment will be stated when applicable):*

#### **Communicate effectively.**

Assessment:

Skills in this competency will be determined based on the student's ability read with comprehension which will be assessed through correctly answered homework assignments, as well as common questions placed on all Unit test.

#### **Apply mathematical skills appropriate to an occupation.**

Assessment:

N/A

#### **Employ effective processes for resolving problems and making decisions.**

Assessment:

N/A

**Demonstrate the basic computer skills necessary to function in a technological world.**

Assessment:

N/A

*To validate proficiency in the general education competencies, students in some programs will be tested using Work Keys.*