

## Biology

**Course Number:** SC3209

**Grade level:** 9–12

**Credits:** 1.0

**Prerequisite Courses:** None

### Course Description

This compelling two-semester course engages students in the study of life and living organisms and examines biology and biochemistry in the real world. This is a year-long course that encompasses traditional concepts in biology and encourages exploration of new discoveries in this field of science. The components include biochemistry, cell biology, cell processes, heredity and reproduction, the evolution of life, taxonomy, human body systems, and ecology.

### Course Objectives

Throughout the course, you will meet the following goals:

- Understand the relationships among living organisms
- Describe the functions and processes that control cellular activities
- Trace the discoveries and scientific thought that increase the application of new technology in the field of DNA and genetics
- Examine the taxonomy that organizes all organisms
- Recognize the structures and functions of systems of the human body
- Relate the interdependence of ecosystems and propose solutions to issues impacting the environment

### Student Expectations

This course requires the same level of commitment from you as a traditional classroom course would. Throughout the course, you are expected to spend approximately 5–7 hours per week online on the following activities:

- Interactive lessons that include a mixture of instructional videos and tasks
- Assignments in which you apply and extend learning in each lesson
- Assessments, including quizzes, tests, and cumulative exams

## Communication

Your teacher will communicate with you regularly through discussions, email, chat, and system announcements. Through this communication with your teacher, you will monitor your progress through the course and improve your learning by reviewing material that was challenging for you.

You will also communicate with classmates, either via online tools or face to face, as you:

- Collaborate on projects
- Ask and answer questions in your peer group
- Develop speaking and listening skills

## Grading Policy

You will be graded on the work you do online and the work you submit electronically to your teacher. The weighting for each category of graded activity is listed below.

Lesson Quizzes	20%
Unit Tests	30%
Cumulative Exams	20%
Assignments	10%
Labs	20%
Additional	0%

## Scope and Sequence

When you log into the Virtual Classroom, you can view the entire course map, which provides a scope and sequence of all topics you will study. Clicking a lesson's link in the course map leads to a page listing instructional activities, assignments, and learning objectives specific to that lesson. The units of study are summarized below:

- Unit 1:** Scientific Knowledge and Inquiry
- Unit 2:** The Building Blocks of Life
- Unit 3:** Cell Biology
- Unit 4:** Cell Processes
- Unit 5:** Molecular Genetics
- Unit 6:** Heredity
- Unit 7:** Scientific Communication
- Unit 8:** The Evolution of Life
- Unit 9:** Taxonomy
- Unit 10:** The Human Body I
- Unit 11:** The Human Body II
- Unit 12:** Ecology