

# Biology Honors

## Course Overview and Syllabus

---

**Course Number:** SC3209H

**Grade level:** 9–12

**Prerequisite Courses:** None

**Credits:** 1.0

### Course Description

This compelling full-year course engages students in a rigorous honors-level curriculum that emphasizes the study of life and its real-world applications. This course examines biological concepts in more depth than general biology and provides a solid foundation for collegiate-level coursework. Course components include biochemistry, cellular structures and functions, genetics and heredity, bioengineering, evolution, structures and functions of the human body, and ecology. Throughout the course, students participate in a variety of interactive and hands-on laboratory activities that enhance concept knowledge and develop scientific process skills, including scientific research and technical writing.

### Course Objectives

Throughout the course, you will meet the following goals:

- Relate the interdependence of ecosystems and propose solutions to issues impacting the environment.
- Understand the relationships among living organisms.
- Describe the functions and processes that control cellular activities.
- Explain the relationship between DNA and protein synthesis.
- Examine the taxonomy that organizes all organisms.
- Recognize the structures and functions of systems of the human body.

### 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
- Assessments, including quizzes, tests, and cumulative exams

## Communication

Your teacher will communicate with you regularly through discussions, e-mail, chat, and system announcements. 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, and develop your 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.

Grading Category	Weight
Quiz	20%
Test	30%
Exam	20%
Assignment	10%
Lab	20%
Additional	0%

## Scope and Sequence

When you log into Edgenuity, you can view the entire course map—an interactive scope and sequence of all topics you will study. The units of study are summarized below:

**Unit 1:** Scientific Inquiry: The Scientific Process

**Unit 2:** Scientific Inquiry: Analyzing and Communicating Scientific Knowledge

**Unit 3:** Chemistry of Life

**Unit 4:** The Cell: Cell Structure and Function

**Unit 5:** The Cell: Cellular Reproduction

**Unit 6:** Matter, Energy, and Organization in Living Systems

**Unit 7:** The Molecular Basis of Heredity: DNA and Protein Synthesis

**Unit 8:** The Molecular Basis of Heredity: Genetics and Heredity

**Unit 9:** The Molecular Basis of Heredity: Genetic Engineering

**Unit 10:** Biological Evolution

**Unit 11:** The Behavior of Organisms: The Human Body – Part 1

**Unit 12:** The Behavior of Organisms: The Human Body – Part 2

**Unit 13:** The Interdependence of Organisms

**Unit 14:** Environmental Quality and Natural Resources