

Life Science

Course Number: SC1112

Grade level: 6–8

Credits: 1.0

Prerequisite Courses: None

Course Description

Examining a broad spectrum of the biological sciences, SC1112 is a two-semester course for middle school students that builds on basic principles of scientific inquiry and translates those skills to more complex overarching biological themes. The course includes units that help students understand the definition, forms, and classifications of living organisms and learn to analyze the diversity of each unique group of living organisms. Other units introduce students to the structures and functions of cells, cell theory, and cell reproduction. These larger themes are then applied to other topics, such as genetics, Darwinian theory, and human biology and health. An introduction of ecology draws all of these concepts together to examine the interrelationships that help to maintain life on Earth.

Course Objectives

Throughout the course, you will meet the following goals:

- Identify the structures within living cells and describe their functions
- Describe how genetic inheritance occurs
- Summarize the major concepts of natural selection and other evolutionary mechanisms
- Examine major structures and key physiological processes in the systems of the human body
- Identify the components of an ecosystem and explain the interactions among them

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, e-mail, 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 do the following:

- 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.

Assignments	10%
Labs	0%
Lesson Quizzes	20%
Unit Tests	50%
Cumulative Exams	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:** Life and Cells
- Unit 2:** Heredity and Evolution
- Unit 3:** Simple Organisms, Fungi, and Plants
- Unit 4:** Animals
- Unit 5:** Human Biology and Health
- Unit 6:** Ecology