Plant Systems
Course Overview and Syllabus

Grade level: 9–12

Prerequisite Courses: None   **Credits:** 0.5

Course Description

Plant Systems is a semester-length high school course that introduces students to the basics of plant biology, soil science, agriculture, and horticulture, along with the environmental management practices involved in each, including integrated pest management, biotechnology, growth techniques, and crop management. Students learn the basic parts of a plant, how plants are scientifically classified, and how they interact with water, air, nutrients, and light to undergo the processes of photosynthesis and respiration. Plant reproduction, including pollination, germination, and dispersal of seeds, is also presented. The course concludes by looking at careers in the plant sciences which includes agronomy, horticulture, or landscape design.

Course Objectives

Throughout the course, you will meet the following goals:

- Study plant biology, from plant anatomy and reproduction to soil management and basic conservation techniques
- Learn about agriculture and crop management
- Explore horticulture, with a focus on greenhouse crops and orchards
- Examine career tracks common in plant sciences, including agriculture, horticulture, landscape design, and biotech research
- Discuss how agricultural economics affects the job market for anyone interested in agronomy, horticulture, or landscape design

Student Expectations

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

- Interactive lessons that include a mixture of videos, readings, 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. 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
Lesson Quizzes	20%
Unit Tests	20%
Cumulative Exams	20%
Assignments	10%
Projects	30%
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: What Is Plant Science?

Unit 2: Plant Structure and Function

Unit 3: Crop Management

Unit 4: Specialty Crops

Unit 5: Plant Science Careers