

# Fundamentals of Computer Systems

## Course Overview and Syllabus

---

**Grade level:** 9–12

**Prerequisite Courses:** None

**Credits:** 0.5

### Course Description

Fundamentals of Computer Systems is a semester-long high school course that provides students with an understanding of computers and how they operate as well as a basic understanding of how to manage and maintain computers and computer systems. These skills provide students with the ability to configure computers and solve computer problems. Students learn details about the different elements of computers and computer systems, how to identify hardware devices and their functions, the role of operating systems as well as how to install and customize Windows operating system. Students also learn about networking and the Internet, security issues, and current software applications, such as Microsoft® Office. In addition, students learn specifics about maintaining and troubleshooting computers, including managing files, backing up systems, and using the administrative tools in Windows operating system. Lastly, students learn the basics of customer service and working as a help desk support technician.

### Course Objectives

Throughout the course, you will meet the following goals:

- Review how computers operate and their functions
- Implement problem-solving techniques to comprehend the nature of computer problems
- Work with hardware, software, and the Internet to develop, maintain, and update computer systems
- Complete IT service-related tasks including installation, configuration, and modification of software and operating systems
- Perform computer backup procedures to protect information
- Recognize potential security threats and understand the procedures for maintaining security
- Develop basic customer service skills to meet customer needs effectively

## 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:** Computer Hardware and Operating Systems
- Unit 2:** Configuring the Computer
- Unit 3:** Computer Programs
- Unit 4:** Protecting Yourself, the Computer, and Your Data
- Unit 5:** Troubleshooting