



# CS Applications: Web Development, Part 1

Grades 6-12

## Programming Language:

JavaScript  
HTML  
CSS

## Software used in Course:

Google Chrome  
Phoenix Code or Pickcode.io

## Supported Devices

Mac  
Windows  
Chromebook

## Instructional Models:

Direct Instruction  
Instructional Scaffolding  
Use of Learning Objectives  
Relevant Vocabulary  
Bloom's Taxonomy or Questions  
Inquiry-Based Instruction  
Project-Based Instruction  
Cooperative Learning  
Independent Study

## Supported Learning Models:

Classroom  
Blended  
Hybrid  
Synchronous  
Asynchronous

## Standards Aligned:

National and State Computer Science Standards

## Reinforces:

Math  
ELA  
Social-Emotional Learning

## Course Description

In this introductory text-based programming course, students build and design websites using JavaScript, HTML, and CSS. Students learn web development fundamentals and web design best practices through a variety of project-based Unplugged and Coding lessons. Digital Citizenship lessons foster safe and positive online behaviors, and STEM Career lessons highlight how STEM knowledge can benefit students regardless of their chosen career path. By the end of this course, students will be able to build basic websites that include hyperlinks, images, lists, and interactive elements.

## Learning Objectives

Each lesson plan is designed to enable students to achieve specific learning outcomes related to course aligned computer science competencies. For example, at the end of this course students will be able to:

- Demonstrate mastery of basic HTML skills by independently building the framework of a webpage.
- Apply the functionality of CSS properties and values.
- Plan and code JavaScript functions to promote user interaction within a website.
- Differentiate between the capabilities of HTML, CSS, and JavaScript.
- Describe negative health effects that can emerge from common technology practices.