

Computer Science Explorations 1 Syllabus

Lower Middle School - 50 hours

Course Overview and Goals

CodeHS takes a modular approach to middle school curriculum, where each module contains about 10 hours of content and introduces students to a specific topic within the field of computer science. Designed specifically for middle school students, students will explore topics in a variety of engaging and interactive ways.

The Computer Science Explorations 1 course is an introductory course for early middle school students. It is great for students who are completely new to coding or for students who are continuing on their coding journey. The modules in this course are stand alone modules, and they can be taught in any order. The only exception is that students need to have completed Karel Adventures 1 before starting Karel Adventures 2.

This course is the first course in the **CodeHS Middle School Pathway**:

6th	Computer Science Explorations 1
7th	Computer Science Explorations 2
8th	Python Basics with Tracy 1 and 2

Learning Environment: The course utilizes a blended classroom approach. The content is a mix of web-based and physical activities. Students will write and run code in the browser, create digital presentations, complete interactive activities online, and engage in in-person collaborative exercises with classmates. Teachers utilize tools and resources provided by CodeHS to leverage time in the classroom and give focused 1-on-1 attention to students.

Technology Requirements: To complete all activities and exercises in this course, students must have access to the 3rd party sites and tools listed here: [Computer Science Explorations 1 Course Links](#)

Module Overviews

Module	Description	Overview Video Link
Karel Adventures 1	Students learn the basics of JavaScript as they follow Karel the Dog on two fun-filled adventures.	Karel Adventures 1 Overview
Karel Adventures 2	Students build on their learning from Karel Adventures 1 to learn about functions and program planning as they follow Karel the Dog on two fun-filled adventures	Karel Adventures 2 Overview
Exploring Computing	Students explore different technologies and the impact they have on our world.	Exploring Computing Overview
Tracy Adventures	Students will learn how to use basic commands, variables, and functions in their programs.	Tracy Adventures Overview
Exploring Digital Citizenship	Students learn about Internet etiquette and how to stay safe on the world wide web.	Exploring Digital Citizenship Overview