

Course Overview and Goals

Every middle school approaches computer science in a unique way, and the CodeHS Mix and Match Middle School course seeks to make it easy for teachers to develop a curriculum that meets the needs of their specific school and students.

The CodeHS Mix and Match Middle School Course contains all of the CodeHS introductory middle school content. 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. Teachers can remove and reorder the modules to create a course that meets the needs of their students and class setup. Designed specifically for middle school students, students will explore topics in a variety of engaging and interactive ways.

Learning Environment: The course utilizes a blended classroom approach. The content is a mix of web-based and physical activities. Depending on the chosen modules, students may write and run code in the browser, create websites and 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.

Course Creation Guidance

As you are considering which modules to use for your middle school course, there are a few things to keep in mind. Some of the modules are designed for early middle school, some are designed for upper middle school, and others are designed for general middle school. Use the **Module Overview** table below for guidance on which modules are designed for which levels. Additionally, all modules can be taught in any order, with the exception of Karel Adventures 1 and Karel Adventures 2.

Module Overviews

Module	Description	Upper or Middle	Overview Video Link
Karel Adventures 1	Students learn the basics of JavaScript as they follow Karel the Dog on two fun-filled adventures.	Lower middle school	<u>Karel Adventures 1</u> <u>Overview</u>
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	Lower middle school	<u>Karel Adventures 2</u> Overview
Tracy Adventures	Students will learn how to use basic commands, variables, and functions in their programs.	Lower middle school	Tracy Adventures Overview
Exploring Computing	Students explore different technologies and the impact they have on our world.	Upper or lower middle school	Exploring Computing Overview
Exploring Web Design 1	Students learn the basics of HTML and CSS as they create their own websites.	Upper or lower middle school	Exploring Web Design 1 Overview
Exploring the Internet	Students learn about network protocols and different strategies used to protect online information.	Upper or lower middle school	Exploring the Internet Overview
Exploring Digital Citizenship	Students learn about Internet etiquette and how to stay safe on the world wide web.	Upper or lower middle school	Exploring Digital Citizenship Overview
Exploring Data and Spreadsheets	Students learn how to collect, organize, visualize, and analyze data using spreadsheets.	Upper or lower middle school	Exploring Data and Spreadsheets
Exploring Code with Karel	Students learn the basics of programming by giving Karel the Dog commands in a grid world.	Upper middle school	Exploring Code with Karel
Exploring Art with Code	Students explore the intersection of art and technology by creating art programs using p5.js.	Upper middle school	Exploring Art with Code Overview
Exploring Game Design	Students learn the basics of game design and build their very own games.	Upper middle school	Exploring Game Design Overview

Exploring Web Design 2	Students build on their skills from Exploring Web Design 1 to learn the basics of web aesthetics and design principles and create a multi-page website.	Upper middle school	<u>Exploring Web</u> Design 2 Overview
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How to Use Customize Your Middle School Course

It only takes a few steps to customize the Mix and Match course to customize the Mix and Match course! You can follow the steps below to learn how.

- 1. Assign the Mix and Match course to a section.
- 2. Identify which modules you want to keep and which modules you want to remove. If you want to add a module back in later, you can easily do this!
- 3. Remove the unwanted modules. (See this <u>Knowledge Base article</u> for more details.)
 - a. Go to your Assignments page. Next to the module, click on the three dots.
 - b. Select "Remove."
- 4. Reorder the modules to your desired order. (See this Knowledge Base article for more details.)
 - a. Go to your Assignments page. Next to the module, click on the three dots.
 - b. Select the *Move Up* or *Move Down* options until the module is in the desired location.
- 5. Enable Sequential Numbering.
 - a. Go to your Assignments page. Open Course Settings by clicking on the button in the upper right corner.
 - b. Toggle the "Show sequential module numbers" and "Show sequential problem numbers" options so that there is a blue check mark.
- 6. Refresh the page to see your customized middle school course!