



CodeHS

Coding in Sports Syllabus Mini Course (15 Contact Hours)

Course Overview and Goals

Coding + Sports is a mini-course that introduces students to the basics of coding through sports! In this block-coding course, students develop their own sports video games and simulations using code. Throughout the course, students build different sports visualizations and multi-level games that can be played with friends.

Learning Environment: The course utilizes a blended classroom approach. The content is fully web-based, with students writing and running code in the browser. Teachers utilize tools and resources provided by CodeHS to leverage time in the classroom and give focused 1-on-1 attention to students.

Programming Environment: Students write and run JavaScript programs in the browser using the CodeHS editor.

More information: Browse the content of this course at <https://codehs.com/course/4251>

Course Breakdown

Unit 1: Introduction to Coding in Sports (1-3 hours)

Students are introduced to the JavaScript block coding environment. Students curate the environment of their own sports video game.

Objectives / Topics Covered	<ul style="list-style-type: none">● Creating a sports video game
Example Assignments / Labs	<ul style="list-style-type: none">● Make a Shot<ul style="list-style-type: none">○ In this activity, you can customize your video game! Change the images that are used for the background, the ball, the goal, and the paddle. You can use one of our images or find your own image to use! Then see how many goals you can score!

Unit 2: Coding in Sports (10 - 12 hours)

Students learn about event handlers and create more elaborate video games with images, sound, and multiple levels. As a final project, students make a multi-level putting game.

Objectives / Topics Covered	<ul style="list-style-type: none">● Game Events● Sound Effects● Make a Shot!● Air Horn App● Event Handlers
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	<ul style="list-style-type: none">● Putting Game● Level Up
Example Assignments / Labs	<ul style="list-style-type: none">● Score!<ul style="list-style-type: none">○ In this activity, you will add sounds that will play when your events are triggered.● Air Horn App<ul style="list-style-type: none">○ It's time to celebrate having made your first game in this course! Take what you've learned about events and create a program that plays whatever sound you choose when you click on the image.● Putting Game<ul style="list-style-type: none">○ Use events and sound effects to create a fully functional golf putting game.