

# Introduction to JavaScript

GoSkills online course syllabus

Thursday, May 1, 2025

**Skill level**

Beginner

**Lessons**

40

**Accredited by**

CPD

**Pre-requisites**

None

**Video duration**

2h 41m

**Estimated study time**

20h for all materials

**Instructor**

John Elder

## Course Introduction

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1

### Setting Up a Development Environment

Set up the tools you need to use JavaScript.

2

### Where to Use JavaScript

Where does JavaScript go? Putting JavaScript tags in the HTML head, vs body, vs external files.

3

### Syntax

What does JavaScript code look like?

4

### Output

Learn several ways to output data to the screen with JavaScript.

## Basic JavaScript

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5

### Statements and Comments

Understanding the instructions that are executed by the web browser, and learning how to comment code.

6

### Variables

How to store data in variables in JavaScript.

7

### Assignment Operators

How to assign values to a variable, and do basic math assignment.

- 8 Arithmetic Operators  
How to add, subtract, multiply, and divide with JavaScript. We'll also look at the modulus, incrementing and decrementing.
- 9 Comparison and Logic Operators  
How to compare two or more variables and test with logic (and, or, not).
- 10 Strings, Numbers, and Boolean Data Types  
Understanding the difference between strings and numbers; and understanding Boolean data types.
- 11 Arrays  
What are arrays, and how does JavaScript use them?

## Intermediate JavaScript

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- 12 Objects  
What are objects, and how does JavaScript use them?
- 13 Functions  
Implementing and invoking blocks of code with functions.
- 14 If and If/Else and If/Else If Statements  
Understanding conditional statements using If, If Else, and If Else If statements.
- 15 Switch  
Understanding conditional statements using switch.
- 16 For Loops  
Looping through things using For loops.
- 17 While Loops  
Looping through things using While loops.
- 18 Intro to JSON  
Introduction to JSON and why it is important.

## Using JavaScript For The Web

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19 A Short HTML/CSS Primer  
JavaScript works with HTML and CSS, let's do a quick refresher video on HTML and CSS.

20 Intro to the HTML DOM  
What is the DOM and why is it important?

21 DOM Methods and Properties  
What are the actions you can perform on HTML elements and what properties can you get and set?

22 Dom Document Objects  
Finding, changing, adding, and deleting elements.

23 Finding Dom Elements  
Finding elements by ID, by tag name, by class name, by CSS selectors, and by collections.

24 Changing HTML Output, Content, and Attributes  
How to change HTML output, content, and attributes with JavaScript.

25 Changing CSS  
How to change your CSS with JavaScript.

26 Understanding Events  
What is an event, and what can you do with it?

27 Event Listeners  
What are event listeners, and how to listen for event handlers.

28 Navigating DOM Nodes  
What is a DOM node and how do you navigate them.

29 Creating New Nodes  
Adding new nodes on the fly with JavaScript.

30 The Node List  
How to retrieve an array-like collection of nodes.

31 Form Validating  
How to validate an HTML fill-out form with JavaScript.

## 32 Introduction to jQuery

What is jQuery, and why is it important?

## AJAX

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### 33 What Is AJAX

What is AJAX and what is it used for?

### 34 AJAX Requests - GET or POST?

What's the difference between GET and POST and when should you use them?

### 35 AJAX Response

How to handle an AJAX response.

## Building a Math Flashcard App

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### 36 Putting It All Together - What We'll Build

Introduction to building a simple math flashcard app with JavaScript and Ajax.

### 37 Create the Fill-Out Form

Let's create a fill-out form to enter our answers.

### 38 Checking for Numbers

Let's make sure the user entered a number!

### 39 Output the Result

How to output the answers to the screen.

### 40 Finishing Up

Create pages for Subtraction, Multiplication, and Division and finish the app.

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