

# Introduction to JavaScript

GoSkills online course syllabus

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Skill level Lessons Accredited by

Beginner 40 CPD

Pre-requisites Video duration Estimated study time

lone 2h 41m 20h for all materials

Instructor John Elder

#### Course Introduction

Setting Up a Development Environment

Set up the tools you need to use JavaScript.

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?

Output

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

#### Basic JavaScript

Statements and Comments

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

Variables

How to store data in variables in JavaScript.

7 Assignment Operators

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

- Arithmetic Operators
  - How to add, subtract, multiply, and divide with JavaScript. We'll also look at the modulus, incrementing and decrementing.
- Comparison and Logic Operators

How to compare two or more variables and test with logic (and, or, not).

1 Strings, Numbers, and Boolean Data Types

Understanding the difference between strings and numbers; and understanding Boolean data types.

1 1 Arrays

What are arrays, and how does JavaScript use them?

#### Intermediate JavaScript

1 ) Objects

What are objects, and how does JavaScript use them?

1 2 Functions

Implementing and invoking blocks of code with functions.

1 If and If/Else and If/Else If Statements

Understanding conditional statements using If, If Else, and If Else If statements.

1 Switch

Understanding conditional statements using switch.

1 6 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

I D	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.

A Short HTML/CSS Primer

Form Validating

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

The Node List

How to retrieve an array-like collection of nodes.

22	Introduction to jQuery
32	What is jQuery, and why is it important

#### AJAX

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

Putting It All Together - What We'll Build
Introduction to building a simple math flashcard app with JavaScript and Ajax.

Create the Fill-Out Form
Let's create a fill-out form to enter our answers.

Checking for Numbers

Let's make sure the user entered a number!

Output the Result

How to output the answers to the screen.

Finishing Up

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

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