

# Web Development Course Syllabus (7 Days, 2 Hours Daily)

July 2025

## Course Overview

This 7-day course introduces web development with HTML, CSS, and JavaScript. Each day includes 1 hour of theory, 1 hour of practicals, and a 5-question MCQ test (14 hours total).

## Prerequisites

- Basic computer literacy.
- Text editor (e.g., VS Code) and browser installed.

## Daily Breakdown

**Day 1: HTML Basics** • **Theory (1 hr):** HTML structure, tags, semantics. W3Schools: HTML

- **Practical (1 hr):** Create a simple HTML page (e.g., personal bio).
- **MCQ Test (5 questions):**
  1. What does HTML stand for? (a) Hyper Text Markup Language (b) High Text Machine Language (c) Hyper Transfer Markup Language (d) None
  2. Which tag defines a paragraph? (a) <div> (b) <p> (c) <span> (d) <h1>
  3. What is semantic HTML? (a) Styling (b) Meaningful tags (c) JavaScript (d) None
  4. Which tag creates a link? (a) <a> (b) <img> (c) <div> (d) <p>
  5. What is the DOCTYPE declaration? (a) HTML version (b) CSS style (c) JavaScript function (d) None

*Answers: a, b, b, a, a*

**Day 2: CSS Basics** • **Theory (1 hr):** CSS syntax, selectors, box model. W3Schools: CSS

- **Practical (1 hr):** Style an HTML page with CSS (e.g., colors, layout).
- **MCQ Test (5 questions):**
  1. What does CSS stand for? (a) Cascading Style Sheets (b) Computer Style Sheets (c) Creative Style System (d) None
  2. What is a CSS selector? (a) HTML tag (b) Targets elements (c) JavaScript function (d) None
  3. What is the box model? (a) Layout structure (b) Color scheme (c) Font style (d) None
  4. Which property sets text color? (a) background-color (b) color (c) font-size (d) margin
  5. What does margin do? (a) Adds space inside (b) Adds space outside (c) Changes font (d) None

*Answers: a, b, a, b, b*

**Day 3: JavaScript Basics** • **Theory (1 hr):** Variables, functions, events. W3Schools: JavaScript

- **Practical (1 hr):** Add interactivity (e.g., button click) to a webpage.
- **MCQ Test (5 questions):**
  1. What is JavaScript used for? (a) Styling (b) Interactivity (c) Structure (d) None

2. How do you declare a variable? (a) var (b) function (c) class (d) style
3. What is an event in JavaScript? (a) User action (b) CSS style (c) HTML tag (d) None
4. Which keyword defines a function? (a) var (b) function (c) class (d) let
5. What does console.log do? (a) Displays output (b) Styles page (c) Creates link (d) None

Answers: b, a, a, b, a

**Day 4: Responsive Design** • **Theory (1 hr):** Media queries, Bootstrap framework. Bootstrap Docs

- **Practical (1 hr):** Create a responsive layout using Bootstrap.
- **MCQ Test (5 questions):**
  1. What is responsive design? (a) Fixed layout (b) Adapts to screen size (c) Static design (d) None
  2. What is a media query? (a) CSS rule (b) HTML tag (c) JavaScript function (d) None
  3. What is Bootstrap? (a) JavaScript library (b) CSS framework (c) Database (d) None
  4. Which unit is relative in CSS? (a) px (b) vw (c) cm (d) None
  5. What does responsive design improve? (a) User experience (b) File size (c) Data type (d) None

Answers: b, a, b, b, a

**Day 5: DOM Manipulation** • **Theory (1 hr):** DOM structure, event handling. Coursera: Web Development

- **Practical (1 hr):** Manipulate DOM elements (e.g., change text) with JavaScript.
- **MCQ Test (5 questions):**
  1. What is the DOM? (a) Document Object Model (b) Data Object Model (c) Design Object Model (d) None
  2. How do you access an element? (a) getElementById (b) setStyle (c) addEvent (d) None
  3. What is an event listener? (a) HTML tag (b) Listens for user actions (c) CSS rule (d) None
  4. What does innerHTML do? (a) Changes style (b) Changes content (c) Adds event (d) None
  5. Why use DOM manipulation? (a) Static pages (b) Dynamic content (c) Data storage (d) None

Answers: a, a, b, b, b

**Day 6: APIs and Asynchronous JavaScript** • **Theory (1 hr):** Fetch API, async/await. MDN: Fetch API

- **Practical (1 hr):** Fetch data from a public API (e.g., JSONPlaceholder).
- **MCQ Test (5 questions):**
  1. What is an API? (a) Application Programming Interface (b) Application Protocol Interface (c) Advanced Programming Interface (d) None
  2. What does fetch() do? (a) Styles page (b) Retrieves data (c) Changes DOM (d) None
  3. What is async/await used for? (a) Synchronous code (b) Asynchronous code (c) Styling (d) None
  4. What does a Promise represent? (a) Future value (b) Current value (c) Style rule (d) None
  5. What is JSON? (a) Data format (b) Programming language (c) CSS framework (d) None

Answers: a, b, b, a, a

**Day 7: Capstone Project** • **Theory (1 hr):** Project planning, portfolio creation. Coursera: Career Development

- **Practical (1 hr):** Build a personal portfolio website.
- **MCQ Test (5 questions):**

1. What is a portfolio website? (a) Data storage (b) Showcases projects (c) Data encryption (d) None
2. Why plan a web project? (a) Reduce errors (b) Change style (c) Delete data (d) None
3. Which tool is used for coding? (a) Photoshop (b) VS Code (c) Excel (d) None
4. What should a portfolio include? (a) Projects (b) Raw data (c) Errors (d) None
5. Why host projects online? (a) Accessibility (b) Data storage (c) Encryption (d) None

*Answers: b, a, b, a, a*

## Resources

- W3Schools
- MDN Web Docs
- CodePen