

Course outline for HTML and CSS - 7-week

Here's a 7-week course outline for HTML and CSS. This curriculum covers the basics of HTML and CSS, gradually progressing to intermediate topics to provide students with foundational web development skills.

➤ Week 1: Introduction to HTML

- Overview of Web Development
- Introduction to HTML, CSS, and JavaScript.
- Understanding how the web works
Setting Up the Environment
- Text editors, browser tools, and developer tools.
- HTML Basics
- Basic structure of an HTML document.
 - Common HTML elements (`<html>`, `<head>`, `<body>`, `<title>`, `<h1>` to `<h6>`, `<p>`, `<a>`, ``).
- Practice
- Creating a simple webpage with headings, paragraphs, images, and links.

➤ Week 2: HTML Elements and Structure

- Building Structure
- Lists (``, ``, ``), tables (`<table>`, `<tr>`, `<td>`), and forms (`<form>`, `<input>`, `<textarea>`, `<button>`).
- Semantic HTML elements (`<header>`, `<footer>`, `<section>`, `<article>`, `<aside>`, `<nav>`).
- HTML Attributes
- Understanding and using HTML attributes (id, class, href, src, alt, etc.)
- Practice
- Building a simple webpage with navigation, sections, and forms.

➤ Week 3: Introduction to CSS

- What is CSS?
- Overview of CSS and its role in web design.
- Inline, internal, and external CSS.
- CSS Syntax and Selectors
- CSS syntax basics.

- Types of selectors: element, class, id, universal, and grouping selectors
- Color and Typography
- Color values (keywords, HEX, RGB, RGBA).
- Font properties, font families, font sizes, text alignment, and styling.
- Practice
- Styling a basic HTML document with colors, fonts, and text alignment.

➤ **Week 4: Layout and Positioning**

- Box Model
- Understanding the CSS box model (content, padding, border, margin).
- Box-sizing and how it affects layout.
- Positioning Elements
- CSS positioning (static, relative, absolute, fixed, sticky).
- Display and Visibility
- Understanding display values (`block`, `inline`, `inline-block`, `none`).
- Controlling visibility with `visibility` and `opacity`.
- Practice
- Building a simple layout with different positioning techniques.

➤ **Week 5: Responsive Web Design**

- Introduction to Responsive Design
- What is responsive design, and why is it important.
- Media Queries
- Using media queries to adjust styling for different screen sizes.
- Flexible Layouts
- Percentage-based widths, max-width, and min-width.
- Introduction to `vh`, `vw`, and `rem` units.
- Practice
- Building a responsive layout using media queries and flexible units.

➤ **Week 6: CSS Flexbox and Grid**

- CSS Flexbox

- Introduction to Flexbox and its main properties.
- Aligning and distributing items in a flex container.
- CSS Grid
- Introduction to CSS Grid and its main properties.
- Creating complex layouts with rows and columns.
- Flexbox vs. Grid
- Differences and when to use Flexbox and Grid.
- Practice
- Building a complex layout using Flexbox and Grid.

➤ **Week 7: Project and Advanced Topics**

- Web Design Project
- Applying HTML and CSS skills to build a complete webpage
- Advanced CSS Topics
- CSS transitions, transforms, and animations.
- Introduction to CSS variables.
- Testing and Debugging
- Browser developer tools for debugging.
- Cross-browser testing.
- Project Presentation

- Students present their projects to the class, discussing challenges and solutions.

Additional Notes

- Homework and Assignments: Weekly homework to practice concepts.
- Quizzes: At the end of each week, a short quiz to assess understanding.
- Resources: Recommended resources like MDN, W3Schools, and CodePen for additional practice.