

10-Week HTML and CSS Course Outline

This 10-week course outline gradually builds foundational skills and introduces intermediate and advanced topics in HTML and CSS.

Week 1: Introduction to Web Development

- **Overview of Web Development:**
 - Introduction to HTML, CSS, and JavaScript.
 - Understanding the role of front-end development.
 - **Getting Started:**
 - Setting up a text editor (VS Code, Sublime, etc.).
 - Basics of the web browser and developer tools.
 - **HTML Basics:**
 - Basic structure of an HTML document.
 - Common HTML elements: headings, paragraphs, links, images.
 - **Practice:**
 - Create a basic HTML page with headings, paragraphs, and links.
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Week 2: HTML Elements and Structure

- **Semantic HTML:**
 - Introduction to semantic tags (<header>, <footer>, <section>, <article>, <nav>).
 - **HTML Lists and Tables:**
 - Ordered and unordered lists.
 - Creating tables with rows and columns.
 - **Forms:**
 - Introduction to form elements: input, button, textarea, checkbox, radio, etc.
 - **Practice:**
 - Build a webpage with navigation, lists, and forms.
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Week 3: Introduction to CSS

- **What is CSS?**

- Inline, internal, and external CSS.
 - **CSS Syntax and Selectors:**
 - Element, class, ID selectors, and grouping selectors.
 - **Styling Text:**
 - Fonts, colors, text alignment, and line height.
 - **Practice:**
 - Style an HTML document with colors, fonts, and alignments.
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Week 4: The Box Model

- **Understanding the Box Model:**
 - Content, padding, border, and margin.
 - **Border and Backgrounds:**
 - Border styles, border radius, background colors, and images.
 - **Box Sizing:**
 - content-box VS border-box.
 - **Practice:**
 - Create a card-like layout using the box model.
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Week 5: Positioning and Layout Basics

- **CSS Positioning:**
 - Static, relative, absolute, fixed, and sticky positioning.
 - **CSS Display:**
 - block, inline, inline-block, and none.
 - **Visibility:**
 - Difference between visibility and display.
 - **Practice:**
 - Build a webpage with multiple positioned elements.
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Week 6: Responsive Web Design

- **Responsive Design Principles:**
 - Importance of responsive design.
- **Media Queries:**
 - Adjusting styles for different screen sizes.

- **Flexible Units:**
 - Using %, em, rem, vh, and vw for scaling.
 - **Practice:**
 - Build a responsive webpage with a flexible layout.
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Week 7: Advanced Layout Techniques

- **CSS Flexbox:**
 - Main axis, cross axis, justify-content, align-items, flex-wrap.
 - **CSS Grid:**
 - Defining rows and columns, placing items in grid areas.
 - **Flexbox vs Grid:**
 - When to use Flexbox or Grid.
 - **Practice:**
 - Build a responsive webpage using Flexbox and Grid.
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Week 8: Advanced Styling

- **CSS Transitions and Animations:**
 - Adding smooth transitions and keyframe animations.
 - **CSS Variables:**
 - Using variables for maintainable styling.
 - **Shadows and Effects:**
 - Box shadows, text shadows, and hover effects.
 - **Practice:**
 - Add animations and hover effects to an existing webpage.
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Week 9: Accessibility and SEO

- **Introduction to Accessibility:**
 - ARIA roles and semantic HTML.
 - Adding alt text to images and labels to forms.
- **SEO Best Practices:**
 - Proper use of headings, metadata, and links.
- **Performance Optimization:**
 - Minifying CSS and optimizing images.

- **Practice:**
 - Improve accessibility and SEO of a webpage.
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Week 10: Final Project

- **Project Overview:**
 - Build a fully responsive, multi-page website.
 - Incorporate features like navigation menus, forms, and animations.
 - **Testing:**
 - Debugging using browser developer tools.
 - Cross-browser compatibility testing.
 - **Project Presentation:**
 - Present the completed project, discuss the design process and challenges.
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Additional Notes

- **Homework:** Weekly assignments to reinforce concepts.
- **Quizzes:** At the end of each week to assess progress.
- **Resources:**
 - MDN Web Docs: <https://developer.mozilla.org>
 - CodePen: <https://codepen.io>
 - FreeCodeCamp: <https://www.freecodecamp.org>