

HTML Full Course Syllabus

Module 1: Introduction to HTML

- 1. What is HTML?**
 - History of HTML
 - How the Web Works
 - Role of HTML in Web Development
- 2. Basic Structure of an HTML Document**
 - `<!DOCTYPE>`
 - `<html>`, `<head>`, `<title>`, `<body>`
- 3. Setting Up Your Environment**
 - Text Editors (VS Code, Sublime Text, etc.)
 - Browsers and Developer Tools
- 4. Your First HTML Page**
 - Creating and Saving an HTML File
 - Viewing the Page in a Browser

Module 2: HTML Basics

- 1. HTML Elements and Tags**
 - Opening and Closing Tags
 - Self-Closing Tags
- 2. Text Formatting**
 - Headings (`<h1>` to `<h6>`)
 - Paragraphs (`<p>`)
 - Bold (``, ``), Italic (``, `<i>`)
 - Line Breaks (`
`), Horizontal Rules (`<hr>`)
- 3. Comments in HTML**
 - `<!-- Comment -->`
- 4. Attributes**
 - Global Attributes (id, class, style, title, etc.)
 - Specific Attributes (href, src, alt, etc.)

Module 3: Working with Links and Images

1. Hyperlinks

- Anchor Tag (<a>)
- Linking to External Pages
- Linking to Internal Sections (#id)
- Email and Phone Links (mailto:, tel:)

2. Images

- Image Tag ()
- src, alt, width, height Attributes
- Image Formats (JPEG, PNG, SVG, GIF)

3. Figure and Figcaption

- <figure> and <figcaption> Tags

Module 4: Lists and Tables

1. Lists

- Unordered Lists (,)
- Ordered Lists (,)
- Definition Lists (<dl>, <dt>, <dd>)

2. Tables

- Table Structure (<table>, <tr>, <td>, <th>)
- Table Headers and Captions (<thead>, <tbody>, <tfoot>, <caption>)
- Merging Cells (colspan, rowspan)

Module 5: Forms and Input Elements

1. HTML Forms

- Form Tag (<form>)
- action, method, target Attributes

2. Input Elements

- Text Input (<input type="text">)
- Password Input (<input type="password">)
- Radio Buttons (<input type="radio">)
- Checkboxes (<input type="checkbox">)
- Dropdowns (<select>, <option>)

- Textarea (<textarea>)
- Buttons (<button>, <input type="submit">, <input type="reset">)
- 3. **Form Attributes**
 - placeholder, required, disabled, readonly
- 4. **Advanced Input Types**
 - Email, Number, Date, Color, Range, File Upload, etc.

Module 6: Semantic HTML

1. **What is Semantic HTML?**
 - Importance of Semantic Tags
2. **Semantic Elements**
 - <header>, <footer>, <nav>, <main>, <article>, <section>, <aside>, <figure>, <figcaption>, <time>, <mark>, <details>, <summary>
3. **Accessibility and SEO Benefits**

Module 7: Multimedia in HTML

1. **Audio**
 - <audio> Tag
 - Supported Formats (MP3, WAV, OGG)
2. **Video**
 - <video> Tag
 - Supported Formats (MP4, WebM, OGG)
3. **Embedding Content**
 - <iframe> for Embedding Maps, Videos, and Other Content

Module 8: HTML5 Features

1. **New HTML5 Elements**
 - <canvas>, <svg>, <progress>, <meter>, <datalist>
2. **HTML5 APIs**
 - Geolocation API
 - Drag and Drop API

- Web Storage (LocalStorage, SessionStorage)
- 3. **HTML5 Form Enhancements**
 - New Input Types (Date, Color, Range, etc.)
 - Form Validation

Module 9: Responsive Web Design with HTML

1. **Viewport Meta Tag**
 - `<meta name="viewport" content="width=device-width, initial-scale=1.0">`
2. **Responsive Images**
 - srcset and sizes Attributes
 - `<picture>` Tag
3. **Introduction to Media Queries (Basic CSS Integration)**

Module 10: Advanced Topics

1. **HTML Entities**
 - Special Characters (e.g., ` `, `©`, `<`, `>`)
2. **Meta Tags**
 - SEO Meta Tags (`<meta name="description">`, `<meta name="keywords">`)
 - Social Media Meta Tags (Open Graph, Twitter Cards)
3. **HTML Validation**
 - W3C Validator
 - Common Errors and Fixes
4. **Performance Optimization**
 - Minifying HTML
 - Lazy Loading Images

Module 11: Integrating HTML with CSS and JavaScript

1. **Linking CSS to HTML**
 - `<link>` Tag
 - Inline Styles (style Attribute)
 - Internal and External CSS

2. Linking JavaScript to HTML

- <script> Tag
- Inline Scripts vs External Scripts
- async and defer Attributes

Module 12: Project-Based Learning

1. Build a Portfolio Website

- Structure with Semantic HTML
- Add Images, Links, and Forms
- Make it Responsive

2. Build a Blog Layout

- Use Articles, Sections, and Aside
- Add Comments Section

3. Build a Contact Form

- Use All Form Elements
- Add Validation

Module 13: Best Practices and Future Trends

1. HTML Best Practices

- Clean and Readable Code
- Accessibility (ARIA Roles, Alt Text, etc.)
- Cross-Browser Compatibility

2. Future of HTML

- HTML6 (Speculations and Trends)
- Web Components and Custom Elements

Additional Resources

• Books:

- "HTML and CSS: Design and Build Websites" by Jon Duckett
- "Learning Web Design" by Jennifer Niederst Robbins

• Online Tools:

- CodePen, JSFiddle, W3Schools, MDN Web Docs
- **Practice Platforms:**
 - FreeCodeCamp, Codecademy, Scrimba