# HTML Course Outline

## 1. Introduction to HTML

* What is HTML?  
  HTML (HyperText Markup Language) is the standard language used to create web pages. It defines the structure of a webpage using elements represented by tags.
* HTML Versions  
  Overview of the different HTML versions from HTML 1.0 to the latest HTML5, with emphasis on HTML5 as the current standard.
* Basic HTML Document Structure  
  Understand the basic structure of an HTML document, including <!DOCTYPE html>, <html>, <head>, and <body> tags.

## 2. HTML Elements and Tags

* What are HTML Elements and Tags?  
  An HTML element is defined by a start tag, content, and an end tag. Examples: <h1>, <p>, <div>.
* Void Elements  
  HTML elements that do not have closing tags, such as <img>, <br>, <hr>.

## 3. HTML Headings and Paragraphs

* HTML Headings  
  HTML provides six levels of headings, from <h1> to <h6>, used to structure web content hierarchically.
* HTML Paragraphs  
  The <p> tag defines a paragraph. Learn about spacing and alignment of paragraphs.

## 4. HTML Attributes

* What are HTML Attributes?  
  Attributes provide additional information about HTML elements, such as id, class, style, href, etc.
* Global Attributes  
  Discuss global attributes like class, id, title, data-\* and their usage.

## 5. HTML Links

* Creating Hyperlinks  
  Use the <a> (anchor) tag to create links to other pages or resources. Explain the href attribute.
* Types of Links  
  Discuss absolute vs relative links and how to open links in new tabs using target="\_blank".

## 6. HTML Images

* Inserting Images  
  The <img> tag is used to embed images in a webpage. Learn about the src, alt, width, and height attributes.
* Image Optimization  
  Importance of using optimized images for faster page loading.

## 7. HTML Lists

* Ordered Lists  
  Create numbered lists using the <ol> tag.
* Unordered Lists  
  Create bulleted lists using the <ul> tag.
* List Items  
  Define list items using the <li> tag.

## 8. HTML Tables

* Table Structure  
  Create tables using the <table>, <tr>, <th>, and <td> tags.
* Table Headers and Data  
  Learn how to use table headers, rows, and data cells effectively.
* Table Styling  
  Basic styling using CSS for borders, padding, and spacing within tables.

## 9. HTML Forms

* Form Structure  
  Use the <form> tag to create user input forms. Learn about the action and method attributes.
* Form Elements  
  Discuss form input elements like <input>, <textarea>, <button>, <select>, and <option>.
* Form Validation  
  Learn about client-side validation with HTML5 attributes like required, pattern, and minlength.

## 10. HTML Multimedia

* Embedding Videos  
  Use the <video> tag to embed videos, with controls such as play, pause, and volume.
* Embedding Audio  
  Use the <audio> tag to embed audio files with controls.
* IFrames  
  The <iframe> tag allows you to embed other webpages or content, like YouTube videos.

## 11. HTML Semantic Elements

* Introduction to Semantic HTML  
  Semantic elements like <header>, <footer>, <section>, and <article> provide meaning to the webpage structure.
* Importance of Accessibility  
  Discuss how semantic HTML improves accessibility for users with disabilities.

## 12. HTML Forms and Input Types (Advanced)

* HTML5 Input Types  
  Learn about newer input types like email, tel, url, date, and range introduced in HTML5.
* File Upload  
  Use the <input type="file"> tag for file uploads.
* Dropdown Menus  
  Create advanced forms with dropdowns using <select> and <option> tags.

## 13. HTML Block and Inline Elements

* Block-level Elements  
  Elements that occupy the full width, such as <div>, <p>, <h1>.
* Inline Elements  
  Elements that only occupy the necessary space, such as <span>, <a>, <img>.
* Combining Block and Inline Elements  
  Best practices for combining these elements in a webpage.

## 14. HTML Comments and Meta Information

* HTML Comments  
  Use comments in HTML using <!-- comment -->. Comments help in code readability and organization.
* Meta Tags  
  Use the <meta> tag to define metadata about a webpage, such as description, keywords, and author.
* Viewport Meta Tag  
  Discuss the importance of the <meta name="viewport"> tag for responsive design on mobile devices.

## 15. HTML Layout Techniques

* Using <div> for Layouts  
  Use the <div> tag to group content for layout purposes.
* Introduction to Flexbox and Grid Layouts  
  Overview of layout techniques, though CSS handles these more effectively.
* HTML5 Layout Elements  
  Introduction to layout tags like <header>, <nav>, <footer>, <main>, and how they replace div-heavy layouts.

## 16. HTML Best Practices

* Writing Clean HTML  
  Importance of keeping code well-structured and organized.
* Indentation and Readability  
  Proper indentation for better readability and collaboration.
* SEO and HTML  
  Basic SEO best practices when writing HTML, such as using appropriate heading tags and alt attributes for images.

## 17. HTML5 Features

* New Form Elements  
  Discuss new input types and attributes introduced with HTML5, such as <input type="date">, <input type="color">.
* Local Storage and Session Storage  
  Introduce the concept of storing data on the client-side using HTML5.
* HTML5 APIs  
  A brief overview of HTML5 APIs like Geolocation, Drag and Drop, Web Storage.

## 18. Accessibility in HTML

* Introduction to Web Accessibility  
  Making websites accessible to people with disabilities using proper HTML markup.
* ARIA (Accessible Rich Internet Applications)  
  Introduction to ARIA attributes and how they help in improving accessibility for dynamic content.

## 19. HTML Debugging

* Common Errors in HTML  
  Discuss common HTML mistakes and how to troubleshoot them.
* Browser Developer Tools  
  Introduction to browser developer tools for inspecting HTML elements and debugging code.