

# **HTML5 and CSS3 Course Syllabus**

## **Introduction to WEB**

- W3C and W3C Members
- Why WHATWG?
- What is Web?

## **HTML Basics**

- Introduction
- Parts in HTML Document
- Editors
- Basic
- Elements
- Attributes
- Headings
- Basics
- Paragraphs
- Formatting
- Links
- Head
- CSS
- Images
- Tables
- JavaScript
- HTML XHTML
- HTML4 Drawbacks

## **HTML5 Introduction**

- HTML5 HISTORY
- New Features and groups
- Backward Compatibility
- Why HTML5?
- Power of HTML5:
- m or mobi or touch domains
- Common Terms in HTML5

## **HTML5 Syntax**

- The DOCTYPE:
- Character Encoding:

## **Obsolete Elements/Deprecated Elements**

- <acronym>
- <applet>
- <basefont>
- <big>
- <center>
- <dir>
- <font>
- <frame>
- <frameset>

- <isindex>
- <noframes>
- <s>
- <strike>
- <tt>
- <u>
- <xmp>

## HTML5 New Elements

- New Semantic/Structural Elements
- <article>
- <aside>
- <bdi>
- <command>
- <details>
- <dialog>
- <summary>
- <figure>
- <figcaption>
- <footer>
- <header>
- <mark>
- <meter>
- <nav>
- <progress>
- <ruby>
- <rt>
- <rp>
- <section>
- <time>
- <wbr>

## HTML5 Canvas

- What is Canvas?
- Create a Canvas
- Canvas Coordinates
- Canvas – Paths
- Canvas – Text
- Canvas – Gradients
- Canvas – Images

## HTML5 SVG

- What is SVG?
- SVG Advantages
- Differences Between SVG and Canvas
- Comparison of Canvas and SVG

## HTML5 Drag/Drop

- Introduction
- Make an Element Draggable
- What to Drag?Where to Drop?

## HTML5 Geo location

- Introduction
- Locate the User's Position+
- Handling Errors and Rejections
- The `getCurrentPosition()`
- Geolocation object

## HTML5 Video

- Introduction
- Video on the Web
- How It Works?
- Video Formats and Browser Support
- HTML5 Video Tags

## HTML5 Audio

- Introduction
- Audio on the Web
- How It Works?
- Audio Formats and Browser Support
- HTML5 Audio Tags

## HTML5 Input Types

- Introduction
- `color`
- `date`
- `datetime`
- `datetime-local`
- `email`
- `month`
- `number`
- `range`
- `search`
- `tel`
- `time`
- `url`
- `week`

## HTML5 Form Elements

- `<datalist>`
- `<keygen>`
- `<output>`

## HTML5 Form Attributes

- New attributes for `<form>` and `<input>` New attributes for `<form>`:
- `autocomplete`
- `novalidate`

## New attributes for <input>

- autocomplete
- autofocus
- form, formaction
- formenctype, formmethod
- formnovalidate
- formtarget
- height and width
- list, min and max
- multiple
- pattern (regexp)
- placeholder
- required, step

## HTML5 Semantic

- Introduction
- What are Semantic Elements?
- non-semantic elements: <div> and <span>
- semantic elements: <form>, <table>, and <img>
- New Semantic Elements in HTML5
- <header>
- <nav>
- <section>
- <article>
- <aside>
- <figcaption>
- <figure>
- <footer>

## HTML5 Web Storage

- What is HTML5 Web Storage?
- Browser Support
- The localStorage Object
- The sessionStorage Object

## HTML5 App Cache

- What is Application Cache?
- Cache Manifest Basics
- HTML5 Cache Manifest

## HTML5 Web Workers

- What is a Web Worker?
- Check Web Worker Support
- Create a Web Worker File
- Terminate a Web Worker

## HTML5 SSE

- One Way Messaging

- Browser Support
- The EventSource Object

## HTML Media

- New Media Elements
- <audio>
- <video>
- <source>
- <embed>
- <track>

## HTML Multimedia

- What is Multimedia?
- Browser Support
- Multimedia Formats
- Video Formats
- Sound Formats

## HTML5 – MathML

- Introduction
- Using MathML Characters
- Matrix Presentation
- Math Formulas

## CSS 1.0 and 2.0

- CSS Basics
- CSS Introduction
- CSS Syntax, CSS Id, Class and CSS Styling, Styling Backgrounds
- Styling Text, Styling Fonts, Links, Styling Lists and Styling Tables
- CSS Border

## CSS3

- Introduction
- CSS3 Modules
- Selectors
- Box Model
- Backgrounds and Borders
- Text Effects
- 2D/3D Transformations
- Animations
- Multiple Column Layout
- User Interface

## Borders

- border-radius
- box-shadow
- border-image

## CSS3 Backgrounds

- background-size
- background-origin

## CSS3 Text Effects

- text-shadow
- word-wrap

## CSS3 Fonts

- @font-face Rule
- font-stretch
- font-weight

## CSS3 2D Transforms

- How Does it Work?
- Browser Support
- 2D Transforms
- translate()
- rotate()
- scale()
- skew()
- matrix()

## CSS3 3D Transforms

- rotateX()
- rotateY()

## CSS3 Transitions

- How does it work?
- transition-property, duration and delay

## CSS3 Animations

- CSS3 @keyframes Rule
- Browser Support
- Animation, animation-duration

## CSS3 Multiple Columns

- column-count
- column-gap
- column-rule

## CSS3 User Interface

- resize

- box-sizing
- outline-offset