Basic Web Design

# Description:

In this course, students will learn how to design a beautiful and functional website. Students will learn how to take their design and translate it into a live website using Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) programming languages. HTML5 and CSS3 will be the standard versions used in the class. Students will understand design components of websites, including the use of color, layout and when to use different techniques, typography rules, and the importance of imagery. At the conclusion of the course, students will present a website to the class. Upon completion of this course, each student will have hands-on experience creating a fully functioning website. Students do not need to have a previous technical background with HTML or CSS prior to taking this course.

## Course Materials/Textbook/Technical Requirements

Chromebook compatible - no materials needed.

## Module 1: Intro to Web Design

### The Building Blocks

1. Define HTML and its function.
2. Define CSS and its function.

### HTML Syntax

1. Explain HTML tags and their syntax.
2. List the parts of an HTML document’s basic structure.

### Document Structure

1. Explain the functions of each of the document structure tags.

### Text and Formatting

1. Demonstrate correct usage of header tags and paragraph tags.
2. Format text with HTML tags.

### Links

1. Apply a hyperlink to page text.
2. Create pages that link to each other.

### Going Live

1. Write multiple linked HTML documents.

## Module 2: Structure and Function

### Attributes

1. Use attributes to alter an HTML element’s behavior.
2. Organize and link external assets.

### Images

1. Add imagery to an HTML document.
2. Prepare images for web delivery based on file type and size.

### Lists

1. Incorporate lists in a web page.
2. Create an outline using nested lists.

### Tables

1. Build a table in HTML.

### Utilize attributes to build complex tables.

### Forms

1. Create a variety of user input features.

### Comments and Special Characters

1. Demonstrate functional commenting practices.
2. Incorporate special characters into a web page’s text.

## Module 3: Beautification

### Inline Styling

1. Style an HTML element with inline CSS.
2. Manipulate font stylings to improve text design and hierarchy.

### Coloring the Web

1. Add colors to HTML elements.

### Explain the methods of choosing a color in CSS.

### Divs

1. Use div tags in a web page design.
2. Demonstrate effective use of background images via CSS.

### The Box Model

1. Label the areas of an HTML element affected by the Box Model properties.
2. Apply the Box Model properties to improve visual design.

### Internal CSS

1. Implement styling through internal CSS.
2. Affect multiple HTML elements using IDs and classes.

### Improving Lists and Tables

1. Utilize classes to efficiently stylize lists and tables.

## Module 4: Advanced Layouts

### Display Types

1. Describe each HTML element type.
2. Explain the ways the display properties can change an element’s appearance.

### Positioning and Floats

1. Create a complex layout using position properties.
2. Position page elements using the float property.

### Flexible Box Layout

1. Use Flexbox properties to construct dynamic layouts.

### Pseudo Classes and Elements

1. Focus a style using pseudo classes.
2. Make elements dynamic using pseudo classes.

### CSS Files

1. Create and reference a CSS file.

## Module 5: Multimedia

### Audio

1. Embed audio in a web page.

### Video

1. Embed video in a web page

### CSS3 Styling

1. Implement CSS3 style properties.

### Imagery

1. Add stylings that would normally require images or editing a base image file.

### Transitions and Transformations

1. Implement CSS3 transformations.

### Animations

1. Implement CSS3 animations.

## Module 6: Presenting to the Web

### Domains and Hosting

1. List the requirements for having a live website.

### FTP

1. Explain how to use FTP.

### Search Engine Optimization

1. List methods that increase web site traffic.
2. Add appropriate meta attributes to a web site

### Introduction to Responsive Web Design

1. Build responsive capabilities into a web page design through the use of media queries.

### Accessibility

1. Describe and utilize design practices that improve accessibility.

### Final Project

## Semester Exam