Course Description

Stresses a working knowledge of web site designs, construction, and management using HTML or XHTML. Includes headings, lists, links, images, image maps, tables, forms, and frames. Lecture 3 hours per week.

General Course Purpose

Introduces students to the development of web sites while coding HTML and CSS. Students will learn site design, construction, and management using HTML and CSS. Students will not be using automated code generators in this course.

Course Prerequisites/Corequisites

Prerequisite: ITE 115

Course Objectives

Upon completing the course, the student will be able to:

a) Knowledgeable in current web page creation technologies
b) Proficient in using text editors to write HTML and CSS code
c) Able to discuss, recognize, and apply the elements of good design
d) Familiar with the use of web servers

Major Topics to be Included

a) Getting started with HTML and CSS
b) Formatting text
c) Creating hypertext links
d) Using color and graphics
e) Using tables
f) Creating user-friendly navigation
g) Working with HTML forms
h) Working with Cascading Style Sheets
i) Designing HTML and CSS for multiple devices (Responsive Design)
j) Incorporating audio and video elements
k) Publishing to a web server using FTP (File Transfer Protocol)
l) Understanding the implications of copyrights on web design
m) Knowledge of the basics of accessibility as it relates to web design

Student Learning Outcomes
Getting Started with HTML
   a) Understand the history of the WWW and HTML
   b) Use basic HTML syntax correctly
   c) Create headers, paragraphs, and lists
   d) Display HTML document in Web browser

Working with Cascading Style Sheets
   a) Distinguish the proper type of stylesheet to implement.
   b) Use inline styles
   c) Use embedded style sheets
   d) Use external style sheets

Formatting
   a) Use font styles to change font size, color, and face
   b) Use styles to change text, background and link colors
   c) Use color names and values in specifying formats

Creating Links
   a) Understand relative and absolute pathnames
   b) Link to a document in the same directory
   c) Link to a URL
   d) Link to a section of a document
   e) Link to e-mail addresses
   f) Link to folders
   g) Create a link using an image
   h) Create a link which will open in a new browser tab/window

Working with graphics
   a) Demonstrate the use of GIF, JPG and .PNG files
   b) Understand image properties and attributes as they relate to alignment, image size, spacing, ALT attributes, and borders
   c) Understand the difference between client-side and server-side image maps
   d) Create image map hotspots

Using Tables
   a) Demonstrate an understanding of how tables affect content layout
   b) Effectively use tables to create a page layout
   c) Create pages using nested tables
   d) Demonstrate the ability to make cells span rows or columns
   e) Identify the tags required to create a table
   f) Demonstrate the ability to define cell size, spacing, and padding

Creating User Friendly Navigation
   a) Discuss and identify the basics of navigational design
   b) Produce multiple versions of navigational menus
      • Select the best navigational design for a specific purpose

Working with HTML Forms
   • Create forms using all form objects.
   • Create forms using the button, submit, and reset button tags
   • Understand server-side processing

Design HTML and CSS for Multiple Devices
- Identify the types of devices in use and how to adjust the design appropriately
- Apply appropriate designs for each device identified

Incorporate Audio and Video
- Describe the common types of web audio
- Incorporate audio into the site design
- Describe the common types of web video
- Incorporate video in the site design

Publishing using FTP (File Transfer Protocol)
- Upload files to a web server
- Manage folders and files on a web server

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<td>Incorporate audio and video elements</td>
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<td>Publishing and FTP</td>
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