



Class: Introduction to Web Development

Instructor: _____

Dates: _____

Times: _____

Description

Understand various protocols and standards, the interactions between browsers and servers, the difference between client and server side applications, and the future direction of interactive Web applications. Understand the fundamental HTML and CSS syntax. Create web pages and build simple web sites.

Prerequisites

Completion of Strategy Computers A+ Course or, with Strategy Computers' permission, equivalent experience.

Objectives

At the completion of this course, the student will be familiar with HTML, CSS, DOM, JavaScript, and XML syntax and usage. The student will understand how to utilize Hypertext Mark-up Language and Cascading Style Sheets to make functional and manageable web pages. The student will understand the use of the Document Object Model and how it is utilized with JavaScript programming. The student will become familiar with well formed documents using the Extensible Mark-up Language.

Schedule

1.8 Introduction to Hypertext Mark-up Language

Goals: Understand HTML syntax, mark-up tags, and hierarchal structure,

Reading: Chapters 1-4 in Visual Quickstart Guide HTML, XHTML, CSS

Homework: Research 5 HTML tags that are deprecated and what they have been replaced with and/or the new way of providing these same results.

- | | |
|--|---|
| <input type="checkbox"/> Welcome and introductions | <input type="checkbox"/> HTML tags |
| <input type="checkbox"/> First HTML page | <input type="checkbox"/> Hierarchal relationships |
| <input type="checkbox"/> HTML Syntax | <input type="checkbox"/> Rendering versus Programming |

2.8 HTML navigation and graphical content

Goals: Understand how to embed images and make hyperlinks.

Reading: Chapters 4- 6 in Visual Quickstart Guide HTML, XHTML, CSS

Homework: Find the default location in windows where images are stored for a web page.

- | | |
|---|--|
| <input type="checkbox"/> Review and homework review | <input type="checkbox"/> Make multiple pages |
| <input type="checkbox"/> Make a background image | <input type="checkbox"/> Make hyperlinks between pages |
| <input type="checkbox"/> Embed images on a page | <input type="checkbox"/> Basic Graphics editing |

3.8 Introduction to Cascading Style Sheets

Goals: Understand how to apply style information to elements on a page with CSS.

Reading: Chapters 7 – 10 in Visual Quickstart Guide HTML, XHTML, CSS
Chapters 1 – 4 in DHTML and CSS for the World Wide Web

Homework: Research the style attributes to align elements left, center, and right.

- | | |
|---|--|
| <input type="checkbox"/> Review and homework review | <input type="checkbox"/> Selectors, Attributes, Values |
| <input type="checkbox"/> What is a style sheet? | <input type="checkbox"/> Selector ID, class, tag |

4.8 Using Cascade Style Sheets

Goals: Understand how to re-use styles for similar elements on web pages.

Reading: Chapters 11, 15 – 17 in Visual Quickstart Guide
Chapters 5 – 8 in DHTML and CSS for the World Wide Web

Homework: Research how to change the alpha color value of an element. Alpha value is another term for the opacity of an element.

- Review and homework review
- More style attributes
- Using styles for effects
- Style Hierarchy

5.8 Introduction to the Document Object Model

Goals: Understand how to use the document object model to access elements on a page.

Reading: Chapters 9 – 12 in DHTML and CSS for the World Wide Web

Homework: Describe in your own words the difference between getElementById() and getElementsByTagName().

- Review and homework review
- DOM hierarchal structure
- DOM access to objects
- Intro to JavaScript

- DOM nodes

6.8 Introduction to JavaScript using DOM

Goals: Understand how JavaScript can be used with DOM to produce programmatic effects on a web page.

Reading: Chapters 15 – 18 in DHTML and CSS for the World Wide Web

Homework: Write a JavaScript function to change all the DIV's on a page to the same color.

- Review and homework review
- JavaScript syntax
- JavaScript functions
- Writing functions to change elements

7.8 Introduction to XML and XSLT

Goals: Understand the structure of well formed documents in XML and XSLT.

Reading: Chapter 1 in XML for the World Wide Web

Homework: Make an XML file that describes the hierarchal relationship of your family. Family, grandparents, parents, siblings, children can represent elements and/or attributes in your family XML file.

- Review and homework review
- Introduction to XML
- Root element, elements and attributes
- What is XSLT?

8.8 Using XML and XSLT

Goals: Understand how to use XML and XSLT to fill content on a web page.

Reading: Chapter 10 in XML for the World Wide Web

Homework: Write an XSLT to use your family XML data file to display an unsorted list of elements in the hierarchy of your family tree.

- Review and homework review
- Understand how XSLT differs from XML
- Using an XSLT and XML together
- Final project and review to put HTML, CSS, DOM, JavaScript, and XML into a web page.