**ITD 210**

**Web Page Design II**

**COURSE OUTLINE**

**Prerequisites:**

ITD 110

**Course Description:**

Incorporates advanced techniques in web site planning, design, usability, accessibility, advanced site management, and maintenance utilizing web editor software(s).

**Semester Credits:** 3 **Lecture Hours:** 3 **Lab/Recitation Hours:** 0

**ITD 210 Web Page Design II**

**Course Objectives**

**At the completion of this course, the student should be able to:**

Dreamweaver CC 2014

* Introduction to web development
  + Use Dreamweaver to do any of these operations
    - Create a new site from existing files
    - Use the Files panel to review the files for a website
    - Display a web page in Design view, Code view, Split view, or Live view
    - Use the Related Files bar to display the style sheet for a web page
    - Preview a web page in a browser
    - Adjust the workspace layout and panels
    - Set Dreamweaver preferences
  + Describe the components of a web application.
  + Distinguish between the Internet and an intranet.
  + Describe HTTP requests and responses.
  + Distinguish between the way a web server processes static web pages and dynamic web pages.
  + Name the three major web browsers for Windows systems.
  + Describe the use of JavaScript and jQuery.
  + Describe the use of each of these areas of the Dreamweaver IDE: Document window, Files panel, Insert panel, Property Inspector, CSS Designer, and Tag selector.
* An Introduction to HTML5 and CSS3
  + Given an HTML document, use Code view to work with the HTML and CSS for the web page.
  + Given a selector in the CSS for an HTML document, describe what the selector applies to.
  + Describe the use of the root, head, and body elements in an HTML document.
  + Describe these types of HTML tags: opening, closing, and empty.
  + Describe the use of attributes within HTML tags.
  + Distinguish between a block element and an inline element.
  + Describe the use of these block elements: h1, h2, p.
  + Describe the use of these inline elements: img, a, em, strong, br.
  + Describe the use of the div and span elements in the HTML for a modern web site.
  + Describe the use of these HTML5 semantic elements: header, main, section, article, nav, aside, figure, and footer.
  + Describe three ways to include CSS in a web page.
  + Explain why it’s usually best to use an external style sheet for formatting a page.
  + Describe the components of a CSS rule set.
  + Describe the use of these types of CSS selectors: element type, id, class, descendant, pseudo-class, and combination.
  + Describe the change you need to make to an HTML file if you want to use CSS to format the HTML5 semantic elements in older browsers.
  + Describe the purpose of the normalize.css style sheet.
* How to build a website with Dreamweaver
  + Use Dreamweaver to do any of these operations:
    - Create a new site
    - Create a new page
    - Add plain text or an image to a page
    - Use the Property Inspector or the Insert panel to work with HTML
    - Use the CSS Designer to create and work with style rules and styles
    - Use the Property Inspector to work with styles
    - Use Element Live Display to work with classes and IDs
    - Use the CSS Designer to create an external style sheet and attach it to a web page
    - Use the CSS Designer to move style rules and copy styles
    - Create a style sheet for printing
    - Validate the HTML for a web page
    - Change or set the primary and secondary browsers
    - Delete, edit, and duplicate sites
  + Describe the basic structure of a web page that’s created using Dreamweaver.
  + Distinguish between the HTML Property Inspector and the CSS Property Inspector.
  + Compare the techniques for inserting structural elements in Design view, Live view, and Code view.
  + Describe the purpose and use of these three panes of the CSS Designer: Sources, Selectors, and Properties.
  + In general terms, describe the way that you format a web page for printing.
  + Describe the use of the display property for printing a page.
  + Describe the purpose of validating a web page.
* How to work with text, images, and links
  + Use Dreamweaver to do any of these operations:
    - Add text, images, and links to a web page
    - Work with text and images using Live view and the Quick Property Inspector
    - Insert special characters
    - Use the Property Inspector to work with text, images, and links
    - Check the spelling in a web page
    - Optimize an image
    - Check and change links site wide
  + In general terms, describe the difference between plain text and rich text.
  + Describe the purpose of the Quick Property Inspector.
  + In general terms, describe the use of character entities like &nbsp; and &copy;.
  + Give two reasons for checking the spelling in a web page.
  + List and describe the three types of images that are used with websites.
  + Explain when you should set the alt attribute for an image.
  + Describe the goal of image optimization.
  + Explain what an image map and hotspots are used for.
  + In general terms, explain how email, phone, and Skype links differ from text and image links.
  + Explain what a placeholder is and how you create a link to a placeholder.
  + Describe the three potential types of problems that Dreamweaver can identify when you check the links in a site.
* How to use CSS to format text
  + Given an HTML document, create CSS rule sets that style fonts and format the text for the web page.
  + Use the Manage Fonts dialog box to add Adobe Edge Web Fonts, add local web fonts, and create custom font stacks and then use them in your web pages.
  + Distinguish between absolute and relative units of measurement.
  + In general terms, describe the three color models that you can use with Dreamweaver.
  + Describe these properties for styling fonts: font-family, font-style, font-weight, font-size, and line-height.
  + Describe these properties for formatting text: text-indent, text-align, text-decoration, text-transform, and text-shadow.
  + In general terms, describe the difference between Adobe Edge Web Fonts and local web fonts.
  + Explain what a font stack is and when you would typically use a custom font stack.
* How to use CSS for page layout, borders, and backgrounds
  + Given an HTML document, create CSS rule sets that use the CSS box model to apply spacing, borders, and backgrounds to the web page.
  + Given an HTML document with an unordered list, use CSS to create a navigation menu from the list.
  + Given an HTML document, create a CSS style sheet that uses floating to implement a two- or three-column page layout.
  + Describe the use of the CSS box model.
  + Describe the effect of “collapsing margins”.
  + Describe these properties for a block element in a box model: height, width, margin, padding, border, background color, and background image.
  + Describe these CSS3 features for formatting boxes: rounded corners, shadows, and background gradients.
  + Describe these properties for formatting lists: list-style-type, list-style-image, and list-style-position.
  + Describe the use of the display property for creating a horizontal navigation menu from an unordered list.
  + In general terms, explain how you create a multi-tier navigation menu.
  + Describe the use of floating.
  + Describe the use of the clear property in a CSS rule set.
  + Describe the use of absolute, relative, and fixed positioning.
* How to use media queries to create a responsive design
  + Given an HTML document for a desktop layout, create media queries for tablet and smart phone layouts.
  + In general terms, describe the current website practices for providing pages for mobile devices.
  + In general terms, explain what Responsive Web Design is.
  + Name the four main areas of focus when planning a responsive design.
  + Explain what a wireframe is and why its use is critical when planning a responsive design.
  + Describe the use of meta elements for controlling the viewport on mobile devices.
  + In general terms, describe how media queries control the page layout for different screen sizes.
  + Describe three ways that you can display a page in different screen sizes.
  + Explain what a scalable image is and how you create one.
  + Describe the result of using Responsive Menu with a navigation menu.
  + Describe the main advantage of using ProtoFluid to test a responsive design when compared to other techniques.
* How to work with fluid layouts
  + Given the specifications for a page that can be displayed on any device, create that page using a fluid layout.
  + Compare fluid layouts with fixed layouts and describe the benefits of each layout.
  + Describe mobile first design and explain how it affects the structure of a style sheet.
  + Describe the visual aids that Dreamweaver provides for sizing and moving fluid elements.
  + Describe two ways you can be sure that styles are added to the mobile layout for a page.
  + Describe the visual aids that Dreamweaver provides for duplicating and floating fluid elements.
  + Describe the changes that you typically make to a mobile layout to implement a tablet or desktop layout.
* How to use templates and library items
  + Create a template that contains any of the following features:
    - Editable regions
    - Optional regions
    - Repeating regions
    - Editable tag attributes
  + Create a new web page that’s based on a template or apply a template to an existing web page.
  + Make changes to a template and then update any pages that are based on that template.
  + Create a library item and use it in a web page or template.
  + Explain what a template is and describe the four benefits of using one.
  + Explain how an editable region is used within a template.
  + Describe the two types of optional regions and explain how they work.
  + Describe the purpose of an editable tag attribute.
  + Explain why you might want to use nested templates.
  + Describe the use of the Assets panel with templates.
  + Explain what a library item is and what library items are typically used for.
  + Describe the use of the Assets panel with library items.
  + Explain how library items can be used in templates.
* How to add audio, video, and animations to a website
  + Given an HTML document, add audio, video, and animations to the web page.
  + Distinguish between these terms: media type, media player, and codec.
  + List three reasons why you should avoid using the Flash media type.
  + Explain why more than one codec is required to run an audio or video file in all browsers.
  + Describe the source files that should be included when adding audio or video to a web page.
  + Describe what’s required to include media types other than HTML5 audio and video and Flash in a web page.
  + Describe the advantages of using Edge Animate compositions when compared to Flash animations.
  + In general terms, explain how the HTML5 Canvas feature works.
* How to work with tables
  + Use Dreamweaver to perform any of the following operations:
    - Create tables with headers and captions
    - Select a table or one or more columns, rows, or cells and then use the Property Inspector to work with the selection
    - Insert and delete rows and columns in a table
    - Merge and split cells in a table
    - Import the data in a delimited text file into a table
    - Sort the data in a table by one or more columns
  + Describe these components of a table: row, column, cell, header cell, data cell, table header, and caption.
  + Describe the proper use of tables, now that CSS should be used for page layout.
  + Explain when you would typically merge cells in a table.
  + Explain what a delimited text file is.
* How to work more efficiently in Dreamweaver
  + Use the Snippets panel to work with the snippets provided by Dreamweaver.
  + Use the Assets panel to work with any category of asset and to create and work with favorites.
  + Use the find and replace feature to find and, optionally, replace text or source code within a site.
  + Use the History panel to work with the steps that you performed within a document, including creating custom commands.
  + Use Element Quick View to work with the structure of a document.
  + Create and manage custom workspace layouts.
  + Explain what snippets are and how you use them in Dreamweaver.
  + Explain what an asset is in Dreamweaver.
  + Explain what favorites are in Dreamweaver and why you might want to use them.
  + In general terms, describe the operations that you can perform using the find and replace feature.
  + In general terms, describe the operations that you can perform using the History panel.
  + Explain what Element Quick View is and when you might want to use it.
  + Describe the purpose of creating a custom workspace layout.
* How to deploy a website and collaborate with a team
  + Deploy a website to a web server that has Internet access.
  + Synchronize a website to be sure that all the folders and files in the local and remote sites are the same.
  + Configure a website to use the Check In/Check Out feature and then use it to check files in and out.
  + Export, import, and duplicate a site.
  + Create and customize design notes.
  + Get your website into the major search engines and directories.
  + Explain how to get a web host and a domain name.
  + Explain what you must do before you can transfer files to and from your web host.
  + Describe the process of synchronizing a website.
  + Explain why you might want to use the Check In/Check Out feature.
  + Describe how the Files panel indicates the status of the files in a website that uses the Check In/Check Out feature.
  + Explain why you might want to export, import, or duplicate a site.
  + In general terms, describe how design notes work.
  + Describe the process of testing a website after it has been deployed.
  + Describe the process for getting your website into search engines and directories.
  + Describe two ways to control which pages on your site are indexed.
* How to work with forms
  + Use Dreamweaver to create a form that includes any of the form controls, including the HTML5 controls.
  + Use CSS to align and format controls.
  + Use the HTML5 properties and CSS3 selectors for data validation.
  + Use an HTML form to add a search function to a web site.
  + Describe the use of an HTML form for initiating client-side processing or submitting data to a web server.
  + Describe the get and post methods that can be used to submit a form.
  + Describe the use of any of the form controls.
  + Describe the use of tab order and access keys.
  + Describe the use of these HTML5 properties: Auto Complete, Required, and No Validate, and Pattern.
  + Name the three CSS3 selectors for data validation.
  + Describe the use of regular expressions.
  + Describe the use of a form that provides a search function for a web site.
* How to use Dreamweaver behaviors and CSS transitions
  + Use Dreamweaver to attach any of the behaviors presented in this chapter to an object.
  + Use Dreamweaver to create a CSS transition.
  + Describe the following in terms of JavaScript processing: object, event, function, event handler.
  + In general terms, explain how a Dreamweaver implements a behavior.
  + Describe the use of any of the behaviors presented in this chapter.
  + Explain what a CSS transition is and what CSS3 properties you use to implement a transition.
* How to use jQuery and jQuery UI
  + Use Dreamweaver to add any of the widgets presented in this chapter to a web page.
  + Use Dreamweaver to add any effect to an object.
  + Use Dreamweaver to add a plugin to a web page.
  + In general terms, describe jQuery and jQuery UI.
  + In general terms, describe the code that Dreamweaver adds to an HTML document when you add a widget or an effect to the web page.
  + Describe the use of any of the widgets presented in this chapter.
  + Explain what visibility transitions are and how they’re implemented in Dreamweaver.
  + In general terms, describe what you must do to use a plugin.
* How to use jQuery Mobile
  + Use the jQuery Mobile features that are presented in this chapter to build a website for mobile devices.
  + Explain how a JavaScript plugin can be used by a full website to redirect an HTTP request from a mobile device to a mobile website.
  + Describe jQuery mobile and the three files that it requires.
  + Describe the options that you have for implementing jQuery Mobile in Dreamweaver.
  + In general terms, describe how you use jQuery Mobile to build mobile websites.
  + Describe how these attributes are used by jQuery Mobile: data-role, data-transition, data-rel, data-icon, data-theme, data-position, and class.
  + Describe how you use jQuery Mobile swatches to apply themes to the components of a web page.
  + Describe how accordions, collapsible content blocks, and contents lists work.

CSS

* Creating Styles and Style Sheets
  + Understand the Anatomy of a Style
  + Understand Style Sheets
  + Understand how to Create Internal Style Sheets
  + Understand how to Create External Style Sheets
* Selectors: Identify What to Style
  + Understand how to use Tag Selectors: Page-Wide Styling
  + Understand how to use Class Selectors: Pinpoint Control
  + Understand how to use ID Selectors: Specific Page Elements
  + Understand how to style Groups of Tags
  + Understand how to style Tags Within Tags
  + Understand how to use Pseudo-Classes and Pseudo-Elements
  + Understand how to use Attribute Selectors
  + Understand how to use Child Selectors
  + Understand how to use Siblings
  + Understand how to use the :not( ) Selector
* Saving Time with Style Inheritance
  + Understand Inheritance
  + Understand How Inheritance Streamlines Style Sheets
  + Understand The Limits of Inheritance
* Managing Multiple Styles: The Cascade
  + Understand How Styles Cascade
  + Understand Specificity
  + Understand how to Controlling the Cascade
* Formatting Text
  + Demonstrate how to use Fonts
  + Demonstrate how to use Web Fonts
  + Demonstrate how to use Google Web Fonts
  + Demonstrate how to use add Color to Text
  + Demonstrate how to use change Font Size
  + Demonstrate how to use format Words and Letters
  + Demonstrate how to use add Text Shadow
  + Demonstrate how to use format Entire Paragraphs
  + Demonstrate how to use style Lists
* Margins, Padding, and Borders
  + Understand the Box Model
  + Demonstrate how to control Space with Margins and Padding
  + Demonstrate how to use add Borders
  + Demonstrate how to use color the background
  + Demonstrate how to use Rounded Corners
  + Demonstrate how to use Drop Shadows
  + Understand how to Determine Height and Width
  + Demonstrate how to wrap Content with Floating Elements
* Adding Graphics to Web Pages
  + Demonstrate how to use Background Images
  + Demonstrate how to control Repetition
  + Demonstrate how to Position Background Images
  + Demonstrate how to use the Background Property Shorthand
  + Demonstrate how to use Multiple Background Images
  + Demonstrate how to utilize gradient backgrounds
  + Demonstrate how to Apply Easy Gradients with Colorzilla
* Sprucing Up Your Site's Navigation
  + Demonstrate how to Select Which Links to Style
  + Demonstrate how to use style Links
  + Demonstrate how to use build Navigation Bars
  + Demonstrate how to use CSS-Style Preloading Rollovers
  + Demonstrate how to style Particular Types of Links
* CSS Transforms, Transitions, and Animations
  + Demonstrate how to use Transforms
  + Demonstrate how to use Transitions
  + Demonstrate how to use Animations
* Formatting Tables and Forms
  + Demonstrate how to use Tables the Right Way
  + Demonstrate how to style Tables
  + Demonstrate how to style Forms
  + Explain Layout Strategies
* Introducing CSS Layout
  + Demonstrate how to use Types of Web Page Layouts
  + Demonstrate how to How CSS Layout Works
* Building Float-Based Layouts
  + Demonstrate how to Apply Floats to Your Layouts
  + Demonstrate how to Overcome Float Problems
* Responsive Web Design
  + Understand Responsive Web Design Basics
  + Demonstrate how to setup a page for RWD
  + Demonstrate how to use Media Queries
  + Demonstrate how to use Flexible Grids
  + Demonstrate how to use Flexible Images
* Positioning Elements on a Web Pages
  + Demonstrate how Positioning Properties Work
* CSS for the Printed Pages
  + Demonstrate how to Add Media Style Sheets
  + Demonstrate how to use Print Style Sheets
* Improving Your CSS Habits
  + Demonstrate how to Add Comments to CSS
  + Demonstrate how to organize styles and style sheets
  + Demonstrate how to eliminate browser style interference

**ITD 120 Web Page Design II**

Required Course Materials:

Notepad ++, Brackets or other text editor (freeware)  
Some photo editing software (freeware)

Dreamweaver CC 2014

Textbook:

**CSS: The Missing Manual** by David Sawyer McFarland Publisher: O’Reilly, Pub Date: August 30, 2105 ISBN-10: 1491918055 ISBN-13: 978-1491918050, Fourth Edition

The following supplementary materials are available:

1. Safari Online is available for students to view IT texts
2. Internet searches are a fundamental source for auxiliary materials on Web design

**ITD 210 Web Page Design II**

Topical Description: (Outline chapters and sections to be covered in the book – may include timeline)

CSS3: The Missing Manual

Section 1 - CSS Basics

Chapter 2: Creating Styles and Style Sheets

Chapter 3: Selectors: Identify What to Style

Chapter 4: Saving Time with Style Inheritance

Chapter 5: Managing Multiple Styles: The Cascade

Section 2 - Applied CSS

Chapter 6: Formatting Text

Chapter 7: Margins, Padding, and Borders

Chapter 8: Adding Graphics to Web Pages

Chapter 9: Sprucing Up Your Site's Navigation

Chapter 10: CSS Transforms, Transitions, and Animations

Chapter 11: Formatting Tables and Forms

Section 3 - CSS Page Layout

Chapter 12: Introducing CSS Layout

Chapter 13: Building Float-Based Layouts

Chapter 14: Responsive Web Design

Chapter 15: Positioning Elements on a Web Pages

Section 4 - Advanced CSS

Chapter 16: CSS for the Printed Pages

Chapter 17: Improving Your CSS Habits

Murach’s Dreamweaver CC 2014

Section 1: A crash course in Dreamweaver

Chapter 1: An introduction to web development with Dreamweaver

Chapter 2: An introduction to HTML5 and CSS3

Chapter 3: How to build a website with Dreamweaver

Chapter 4: How to work with text, images, and links

Chapter 5: How to use CSS to format text

Chapter 6: How to use CSS for page layout, borders, and backgrounds

Section 2: More Dreamweaver skills as you need them

Chapter 7: How to use media queries to create a responsive design

Chapter 8: How to work with fluid layouts

Chapter 9: How to use templates and library items

Chapter 10: How to add audio, video, and animations to a website

Chapter 11: How to work with tables

Chapter 12: How to work more efficiently in Dreamweaver

Chapter 13: How to deploy a website and collaborate with a team

Section 3: How to create interactive and mobile web pages

Chapter 14: How to work with forms

Chapter 15: How to use Dreamweaver behaviors and CSS transitions

Chapter 16: How to use jQuery and jQuery UI

Chapter 17: How to use jQuery Mobile