

EASTERN ARIZONA COLLEGE

Website Development I

Course Design
2016-2017

Course Information

Division Business
Course Number CMP 272
Title Website Development I
Credits 3
Developed by Janice Lawhorn, Ph.D./Revised by Lydia Mata
Lecture/Lab Ratio 3 Lecture/0 Lab

Transfer Status

ASU	NAU	UA
Elective Credit	ISM Departmental Elective	Non Transferable

Activity Course No
CIP Code 11.0100
Assessment Mode Pre/Post Test (75 Questions/100 Points)
Semester Taught Fall and Spring
GE Category None
Separate Lab No
Awareness Course No
Intensive Writing Course No

Prerequisites

None

Educational Value

In the age of information technology with the advent of the Internet, it becomes important for a student to be able to function at the website level, whether as a user or a developer. In this course, the student will develop skills to do both.

Description

This course prepares the student to develop basic websites for use in all areas of society. The student will develop an understanding of networking requirements for the Internet in regards to web development. Students will learn web site design, planning, and organizational skills. The student will learn and use a wide variety of website development tools at introductory levels. Applications and skills taught will include beginning Dreamweaver, HTML, XHTML, all current standards in industry.

Before enrolling in this course, it is suggested the student have a thorough knowledge of Internet terminology and be comfortable using common Internet features including uploading and downloading files. To be successful, intermediate skills in file management, i.e., saving, copying, moving, and creating files and folders, are needed. A beginning course in the Internet or Operating Systems would be helpful.

Supplies

You will need a Universal Serial Bus (USB/Flash) drive.

Competencies and Performance Standards

1. Develop a basic Web page using Hypertext Markup Language (HTML).

Learning objectives

What you will learn as you master the competency:

- a. Review the history of the Internet, the Web, and HTML.
- b. Describe different HTML standards and specifications.
- c. Learn about the basic syntax of HTML code.
- d. Mark elements using two-sided and one-sided tags.
- e. Insert an element attribute.
- f. Create comments.
- g. Describe block-level elements and inline elements.
- h. Specify an element's appearance with inline styles.
- i. Create and format different types of lists.
- j. Create boldfaced and italicized text.
- k. Describe logical and physical elements.
- l. Define empty elements.
- m. Insert an inline image into a Web page.
- n. Insert a horizontal line into a Web page.
- o. Store meta data in a Web document.
- p. Display special characters and symbols.

Performance Standards

Competence will be demonstrated:

- o through the successful completion of chapter tests, projects, and quizzes
- o by successfully completing the final exam

Criteria - Performance will be satisfactory when:

- o learner reviews the history of the Internet, the Web, and HTML
- o learner describes different HTML standards and specifications
- o learner learns about the basic syntax of HTML code
- o learner marks elements using two-sided and one-sided tags
- o learner inserts an element attribute
- o learner creates comments
- o learner describes block-level elements and inline elements
- o learner specifies an element's appearance with inline styles
- o learner creates and formats different types of lists
- o learner creates boldfaced and italicized text
- o learner describes logical and physical elements
- o learner defines empty elements
- o learner inserts an inline image into a Web page

- o learner inserts a horizontal line into a Web page
- o learner stores meta data in a Web document
- o learner displays special characters and symbols

2. Develop a basic Website using HTML.

Learning objectives

What you will learn as you master the competency:

- a. Define links and how to use them.
- b. Create element ids to mark specific locations within a document.
- c. Create links to jump between sections of the same document.
- d. Describe how to set and use anchors for backward compatibility with older browsers.
- e. List different types of Website structures and how to employ them.
- f. Create links between documents.
- g. Create links to sections within a document.
- h. Define absolute and relative paths.
- i. Interpret the structure and contents of a URL.
- j. Link to a page on the Web.
- k. Link to FTP servers, newsgroups, and e-mail addresses.
- l. Open links in a secondary window.
- m. Work with popup titles and access keys.
- n. Create semantic links.
- o. Create link elements.

Performance Standards

Competence will be demonstrated:

- o through the successful completion of chapter tests, projects, and quizzes
- o by successfully completing the final exam

Criteria - Performance will be satisfactory when:

- o learner defines links and how to use them
- o learner creates element ids to mark specific locations within a document
- o learner creates links to jump between sections of the same document
- o learner describes how to set and use anchors for backward compatibility with older browsers
- o learner lists different types of Web site structures and how to employ them
- o learner creates links between documents
- o learner creates links to sections within a document
- o learner defines absolute and relative paths
- o learner interprets the structure and contents of a URL
- o learner links to a page on the Web
- o learner links to FTP servers, newsgroups, and e-mail addresses
- o learner opens links in a secondary window
- o learner works with popup titles and access keys

- o learner creates semantic links
- o learner creates link elements

3. Design a Web page and work with fonts, colors, and graphics using HTML.

Learning objectives

What you will learn as you master the competency:

- a. Learn how HTML handles colors, and how to use colors effectively.
- b. Create foreground and background colors using styles.
- c. Select different font styles and designs using styles.
- d. Align text with surrounding content using styles.
- e. Control spacing between letters, words, and lines using styles.
- f. Learn about the different graphic formats supported on the Web and how to use them effectively.
- g. Understand how to use transparent images and animated graphics.
- h. Apply a background image to an element.
- i. Float an image on the right or left page margin.
- j. Set the margin size around an element.
- k. Understand image maps and how to use them.
- l. Create image map hotspots and link them to destination documents.
- m. Apply an image map to an inline image.
- n. Remove the border from a linked image.

Performance Standards

Competence will be demonstrated:

- o through the successful completion of chapter tests, projects, and quizzes
- o by successfully completing the final exam

Criteria - Performance will be satisfactory when:

- o learner learns how HTML handles colors, and how to use colors effectively
- o learner creates foreground and background colors using styles
- o learner selects different font styles and designs using styles
- o learner aligns text with surrounding content using styles
- o learner controls spacing between letters, words, and lines using styles
- o learner learns about the different graphic formats supported on the Web and how to use them effectively
- o learner understands how to use transparent images and animated graphics
- o learner applies a background image to an element
- o learner floats an image on the right or left page margin
- o learner sets the margin size around an element
- o learner understands image maps and how to use them
- o learner creates image map hotspots and links them to destination documents
- o learner applies an image map to an inline image
- o learner removes the border from a linked image

4. Design a Web page with tables using HTML.

Learning objectives

What you will learn as you master the competency:

- a. Work with preformatted text to create a basic text table.
- b. Create the basic structure of a graphical table.
- c. Organize table rows into row groups.
- d. Add a caption to a table.
- e. Describe how to add summary information to a table.
- f. Create table borders and gridlines.
- g. Specify the width and height for different table elements.
- h. Format the contents of table cells.
- i. Apply a background image and color to a table.
- j. Describe the different types of page layouts that can be achieved with tables.
- k. Work with both fixed-width and fluid layouts.
- l. Create a newspaper-style layout using tables.

Performance Standards

Competence will be demonstrated:

- o through the successful completion of chapter tests, projects, and quizzes
- o by successfully completing the final exam

Criteria - Performance will be satisfactory when:

- o learner works with preformatted text to create a basic text table
- o learner creates the basic structure of a graphical table
- o learner organizes table rows into row groups
- o learner adds a caption to a table
- o learner describes how to add summary information to a table
- o learner creates table borders and gridlines
- o learner specifies the width and height for different table elements
- o learner formats the contents of table cells
- o learner applies a background image and color to a table
- o learner describes the different types of page layouts that can be achieved with tables
- o learner works with both fixed-width and fluid layouts
- o learner creates a newspaper-style layout using tables

5. Design a Website with frames using HTML.

Learning objectives

What you will learn as you master the competency:

- a. Describe the uses of frames in a Website.
- b. Lay out frames within a browser window.
- c. Display a document within a frame.
- d. Format the appearance of frames by setting the margin widths, removing scrollbars, and specifying whether users can resize frames.
- e. Direct a link target to a specific frame.

- f. Direct a link target outside of a frame layout.
- g. Add page content for browsers that don't support frames.
- h. Format the color and size of frame borders.
- i. Incorporate an inline frame in a page.

Performance Standards

Competence will be demonstrated:

- o through the successful completion of chapter tests, projects, and quizzes
- o by successfully completing the final exam

Criteria - Performance will be satisfactory when:

- o learner describes the uses of frames in a Website
- o learner lays out frames within a browser window
- o learner displays a document within a frame
- o learner formats the appearance of frames by setting the margin widths, removing scrollbars, and specifying whether users can resize frames
- o learner directs a link target to a specific frame
- o learner directs a link target outside of a frame layout
- o learner adds page content for browsers that don't support frames
- o learner formats the color and size of frame borders
- o learner incorporates an inline frame in a page

6. Explore Dreamweaver and existing Websites.

Learning objectives

What you will learn as you master the competency:

- a. Explore the structure of the Internet and the World Wide Web.
- b. Become familiar with the roles of Web servers and Web clients.
- c. Learn the basic components of a Web page.
- d. Review the history and design approaches of Web design software.
- e. Start Dreamweaver and select a layout.
- f. Create a local site definition.
- g. Explore the Dreamweaver tool set.
- h. Investigate the Dreamweaver Help features.
- i. Exit Dreamweaver.

Performance Standards

Competence will be demonstrated:

- o through the successful completion of chapter tests, projects, and quizzes
- o by successfully completing the final exam

Criteria - Performance will be satisfactory when:

- o learner explores the structure of the Internet and the World Wide Web
- o learner becomes familiar with the roles of Web servers and Web clients
- o learner learns the basic components of a Web page
- o learner reviews the history and design approaches of Web design software
- o learner starts Dreamweaver and selects a layout

- o learner creates a local site definition
- o learner explores the Dreamweaver tool set
- o learner investigates the Dreamweaver Help features
- o learner exits Dreamweaver

7. Plan and design a successful Website with Dreamweaver.

Learning objectives

What you will learn as you master the competency:

- a. Determine the site goals.
- b. Identify the target audience.
- c. Conduct market research.
- d. Create end-user scenarios.
- e. Design the information architecture.
- f. Create a flowchart and site structure.
- g. Create a site concept and metaphor.
- h. Design the site navigation structure.
- i. Develop the aesthetic concept for the site.
- j. Create a site definition for the site.
- k. Add pages to a site.
- l. Set page properties.
- m. Preview the site in a browser.
- n. Upload the site to a remote server, and preview it on the Web.

Performance Standards

Competence will be demonstrated:

- o through the successful completion of chapter tests, projects, and quizzes
- o by successfully completing the final exam

Criteria - Performance will be satisfactory when:

- o learner determines the site's goals
- o learner identifies the target audience
- o learner conducts market research
- o learner creates end-user scenarios
- o learner designs the information architecture
- o learner creates a flowchart and site structure
- o learner creates a site concept and metaphor
- o learner designs the site navigation structure
- o learner develops the aesthetic concept for the site
- o learner creates a site definition for the site
- o learner adds pages to a site
- o learner sets page properties
- o learner previews the site in a browser
- o learner uploads the site to a remote server, and previews it on the Web

8. Add and format text using the property inspector, Cascading Style Sheet (CSS) styles, and HTML tags in the Dreamweaver environment.

Learning objectives

What you will learn as you master the competency:

- a. Type text into a page.
- b. Copy text from a document and paste it into a page.
- c. Check for spelling errors.
- d. Create hyperlinks.
- e. Examine HTML tags for hyperlinks within Dreamweaver.
- f. Explore CSS styles and style sheets.
- g. Modify HTML tags in Dreamweaver.
- h. Create custom style classes.
- i. Create styles for the <a> tag selectors.
- j. Create an external style sheet.
- k. Attach an external style sheet to a Web page.
- l. Edit styles.
- m. Delete styles.
- n. Examine the code for styles and style sheets.

Performance Standards

Competence will be demonstrated:

- o through the successful completion of chapter tests, projects, and quizzes
- o by successfully completing the final exam

Criteria - Performance will be satisfactory when:

- o learner types text into a page
- o learner copies text from a document and pastes it into a page
- o learner checks for spelling errors
- o learner creates hyperlinks
- o learner examines HTML tags for hyperlinks with Dreamweaver
- o learner explores CSS styles and style sheets
- o learner modifies HTML tags in Dreamweaver
- o learner creates custom style classes
- o learner creates styles for the <a> tag selectors
- o learner creates an external style sheet
- o learner attaches an external style sheet to a Web page
- o learner edits styles
- o learner deletes styles
- o learner examines the code for styles and style sheets

9. Organize page content and layout and work with graphics, rollovers, and tables in Dreamweaver.

Learning objectives

What you will learn as you master the competency:

- a. Review graphic formats and compression.
- b. Add graphics to a Web page.
- c. Format and edit graphics.
- d. Create graphic hyperlinks and an image map in Dreamweaver.
- e. Create a rollover.
- f. Create tables and enter table content.
- g. Select tables and table elements.
- h. Format and resize tables.
- i. Format, resize, add, and delete, cells, rows, and columns.
- j. Create tables in Layout mode.
- k. Use invisible graphics as spacers.
- l. Format and resize tables in Layout mode.
- m. Format, resize, add, and delete cells, rows, and columns in Layout mode.

Performance Standards

Competence will be demonstrated:

- o through the successful completion of chapter tests, projects, and quizzes
- o by successfully completing the final exam

Criteria - Performance will be satisfactory when:

- o learner reviews graphic formats and compression
- o learner adds graphics to a Web page
- o learner formats and edits graphics
- o learner creates graphic hyperlinks and an image map in Dreamweaver
- o learner creates a rollover
- o learner creates tables and enters table content
- o learner selects tables and table elements
- o learner formats and resizes tables
- o learner formats, resizes, adds, deletes, cells, rows, and columns
- o learner creates tables in Layout mode
- o learner uses invisible graphics as spacers
- o learner formats and resizes tables in Layout mode
- o learner formats, resizes, adds, and deletes cells, rows, and columns in Layout mode

10. Add shared site elements including navigation bars and frames in Dreamweaver.

Learning objectives

What you will learn as you master the competency:

- a. Insert a navigation bar.
- b. Copy a navigation bar to other pages.

- c. Modify a navigation bar.
- d. Understand frames and framesets.
- e. Create a Web page with frames.
- f. Adjust frame properties and attributes.
- g. Create hyperlinks with targets.
- h. Troubleshoot common problems with frames.

Performance Standards

Competence will be demonstrated:

- o through the successful completion of chapter tests, projects, and quizzes
- o by successfully completing the final exam

Criteria - Performance will be satisfactory when:

- o learner inserts a navigation bar
- o learner copies a navigation bar to other pages
- o learner modifies a navigation bar
- o learner understands frames and framesets
- o learner creates a Web page with frames
- o learner adjusts frame properties and attributes
- o learner creates hyperlinks with targets
- o learner troubleshoots common problems with frames

11. Create dynamic pages by inserting layers and adding behaviors.

Learning objectives

What you will learn as you master the competency:

- a. Insert a layer into a Web page.
- b. Select, resize, and move a layer.
- c. Add content to a layer.
- d. Adjust layer stacking order.
- e. Align layers.
- f. Nest layers.
- g. Add behaviors to a page.
- h. Create an e-mail link.
- i. Edit and delete behaviors.

Performance Standards

Competence will be demonstrated:

- o through the successful completion of chapter tests, projects, and quizzes
- o by successfully completing the final exam

Criteria - Performance will be satisfactory when:

- o learner inserts a layer into a Web page
- o learner selects, resizes, and moves a layer
- o learner adds content to a layer
- o learner adjusts layer stacking order

- learner aligns layers
- learner nests layers
- learner adds behaviors to a page
- learner creates an e-mail link
- learner edits and deletes behaviors

Types of Instruction

Lecture/Classroom Demonstration/Presentation

Lab

Grading Information***Grading Rationale***

The final exam will count as the post-test and will represent 10% of the final grade.

Grading Scale

A 90% - 100%

B 80% - 89%

C 70% - 79%

D 60% - 69%

F Below 60%