

COURSE OUTLINE

CMSY-148
Advanced HTML
3 Semester Hours

HOWARD COMMUNITY COLLEGE

Description

This course presents in-depth coverage of HTML and XHTML. Students will learn the structure and syntax of HTML, including cascading style sheets, dynamic Web pages using JavaScript and DHTML, and the creation and use of XML documents. The course also reviews formatting text, incorporating graphics, adding interactive forms, creating tables, advanced Web page structuring, and Web page design. Familiarity with basic HTML is assumed. Prerequisite: CMSY-128 or CMSY-129. (3 hours weekly)

Overall Course Objectives

Upon completion of this course, the student will be able to:

1. Define HTML and XHTML and the standards used for Web development.
2. Create, edit and improve a Web page by using background color, aligning a heading, adding a horizontal rule, form, table and frame elements, and image mapping.
3. Use unordered, ordered, and definition lists to present information on a Web page.
4. Develop a multipage Web site that links pages using text, menu bar and images as links.
5. Add the three kinds of Cascading Style Sheets to a web page: external, embedded, and inline.
6. Integrate JavaScript and HTML.
7. Define Dynamic HTML (DHTML) and explain its uses in Web page development.
8. Test, view and print the Web page.
9. Use the basic syntax of XML and understand the concepts of creating and using XML documents.

Major Topics

- I. Using an HTML editor
 - A. Tasks of editor (as an automation tool to generate HTML code)
 - B. Overview of editor
- II. Working with Tables
 - A. Planning and creating a table
 - B. Spanning rows and columns
 - C. Formatting borders
 - D. Aligning table contents
 - E. Changing table dimensions
- III. Creating an Image Map
 - A. Image map components
 - B. Mapping image coordinates
 - C. Coding the image map using tags and attributes

- IV. Using Forms to Control Input
 - A. Input controls
 - B. Adding radio buttons and checkboxes
 - C. Adding submit and reset buttons

- V. Working with Style Sheets
 - A. Create an embedded style sheet
 - B. Linking to an external style sheet
 - C. Adding an inline style sheet
 - D. Creating a class

- VI. Integrating JavaScript and HTML
 - A. Writing and debugging a script
 - B. Understanding objects, properties, and methods
 - C. Using JavaScript event handlers
 - D. Assigning a variable
 - E. Creating a JavaScript user-defined function

- VII. Working with Dynamic HTML
 - A. Understand the DHTML Object Model
 - B. Understand browser variability
 - C. Design DHTML pages
 - D. Manipulate data dynamically
 - E. Positioning with DHTML

- VIII. Creating and Using XML Documents
 - A. Understand extensible Markup Language (XML)
 - B. Define XML elements and structure
 - C. Enter XML data
 - D. Bind XML data to HTML
 - E. Format and display XML data with HTML

Course Requirements

Grading/exams: Specific criteria, assignments and activities for evaluating student mastery of objectives will be described in the individual class syllabus, but will include the following:

1. Projects developing web page elements with HTML, XHTML, and other computer software
2. Written tests and quizzes

Other Course Information

This course is a business elective.