MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE
COURSE OUTLINE

Faculty are required to have the outline submitted to the Academic Affairs Office. The course outline is the form used for approval of new courses by the Collegewide Curriculum Committee.

DEPT.: Computer Science COURSE NO.: CSCI 2215
NUMBER OF CREDITS: 3
COURSE TITLE: Web Programming I with HTML
CATALOG DESCRIPTION: Discusses fundamentals of web servers, web sites and web programming in the context of using the technology to craft a conveying message to an Internet audience. An overview of the history and origins of web programming continues with the robust creation of HTML source code that supports and sustains the use of internal and external linking, multiple media elements, tables, image mapping, frames and input forms. The primary objective is to create and manage a multiple page website using HTML, DHTML, CGI and JavaScript programming code.

AUDIENCE: Likely to be offered as instructor led, web-enhanced, ITV or via the Internet
FULFILLS MN TRANSFER CURRICULUM AREA(S) (Leave blank if not applicable)

Area : by meeting the following competencies:
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PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE:
CSCI 1102 Introduction to Microcomputers
LENGTH OF COURSE: One semester
THIS COURSE IS USUALLY OFFERED:
Every other year fall or spring semester.

Four goals are emphasized in course at Minnesota West Community & Technical College:

1) ACADEMIC CONTENT:
   a) Discuss Web editors, Web browsers and Web pages/sites and identify their purposes
   b) Discuss and apply the five Web development phases to the creation and maintenance of Web pages/sites.
   c) Study the source code of HTML and such enhancements as JavaScript, DHTML, XML and Style Sheets
2) THINKING SKILLS:
   a) Determine logical navigational methods for Web pages/sites
   b) Appreciate and implement aesthetically pleasing Web pages/sites
3) COMMUNICATIONS SKILLS:
   a) Discuss, define and describe, using current terminology, one’s working knowledge of learning aids and support tools use in Web page/site development and continued maintenance.
4) HUMAN DIVERSITY: “Experiencing a technology threshold that will forever change the way we
learn, work, socialize and shop. The computer will affect all of us, and business of
every type in
ways far more pervasive than most people realize.” Bill Gates, COMPLEX ‘94

TOPICS TO BE COVERED:
- Introduction to HTML
- Creating and editing a Web page
- Creating a Web site with links
- Creating tables in a Web page/site
- Creating an image map
- Creating frames on a Web page/site
- Creating forms on a Web page/site
- Working with Style Sheets
- Integrating JavaScript and HTML
- Creating Pop-Up windows, scrolling messages and validating forms
- Using DHTML to enhance Web pages/sites
- Creating and using XML documents

LIST OF EXPECTED COURSE OUTCOMES:
- Students will publish projects to computer science server for friends and relatives to view
- Sample code and shared code will assist and accelerate student learning objectives
- Define the Hypertext Markup Language (HTML) and the standards used for Web development
- Describe Web editors and their relationship to Web development, describe Web site layouts and their purpose
- Introduce HTML tags to create a web page, edit, save, print and view in browser
- Create a Web Site with Links, Enhance a Web page/site using images, backgrounds, attributes for text and bullet types
- Define table elements of color to individual cells and rows, Insert table captions, Alter the spacing using the CELLSPACING, CELLPADDING, ROWSPAN and the COLSPAN attributes
- Define terms related to image mapping, Sketch hotspots on an image, Describe how the x- and y-coordinates relate to vertical and horizontal alignment
- Use the <MAP></MAP> tags to start and end a map, Insert an image into a table, use the USEMAP attribute to define a map
- Use the <AREA> tag to indicate the shape, coordinates, and URL for a mapped area
- Define terms related to frames, Use the <FRAMESET> and the <FRAME> tag
- Change frame scrolling options, Name a frame content target, Set frame rows and frame columns
- W3C Accessibility guidelines for developers, URL’s supporting accessibility guidelines and compatibility issues
- Define terms related to forms, Creating Forms on a Web page/site
• Describe the three different types of cascading style sheets, implementing Style Sheets
• Discuss how to integrate JavaScript and HTML, Integrating JavaScript with HTML
• Explain the four basic components of a scrolling message, Creating Pop-up Windows, Adding Scrolling Messages, and Validating Forms
• Define DHTML and explain its uses in Web page development, Define the document object model (DOM), Use DHTML to Enhance Web pages/sites
• Describe an XML document, State the W3C design goals for creating XML tags, Bind a CSS file to an XML document

LEARNING/TEACHING TECHNIQUES used in the course are:
X Collaborative Learning  X Problem Solving
Student Presentations   X Interactive Lectures
X Creative Projects  X Individual Coaching
X Lecture   X PowerPoint Slides
X Demonstrations     Other (describe below)
X Use of Academic Computer Center to complete homework assignments outside of classtime

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:
X Reading      X Tests    X Individual Projects
Oral Presentations Worksheets  X Collaborative Projects
X Textbook Problems    Papers  Portfolio
X Group Problems   Term Paper
Other (describe below)
X Use of Academic Computer Center to complete homework assignments outside of classtime

EXPECTED STUDENT LEARNING OUTCOMES:
1. The student will successfully identify and use web programming terminology
2. The student will complete chapter sections of study on theory, which includes lecture, demonstrations, assignments, and typically a chapter or unit test.

3. The student will complete a chapter of step-by-step instructions and expand knowledge by completing additional projects and case studies as assigned.

4. The student will successfully create and manage web page(s)/site(s) using HTML, DHTML, JavaScript, XML and Style Sheets when developing source code.
5. The student will successfully use the Internet for research, textbook suggested interactive study, accessibility guidelines, publishing and viewing of individual projects
6. The student will be exposed to extensions and add-ons to HTML of JavaScript, DHTML, XML and Style Sheets

The information in this course outline is subject to revision

Veteran Services: Minnesota West is dedicated to assisting veterans and eligible family members in achieving their educational goals efficiently. Active duty and reserve/guard
military members should advise their instructor of all regularly scheduled military appointments and duties that conflict with scheduled course requirements. Instructors will make every effort to work with the student to identify adjusted timelines. If you are a veteran, please contact the Minnesota West Veterans Service Office.

To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, students are encouraged to notify their instructor.

This document is available in alternative formats to individuals with disabilities by contacting the Student Services Advisor or by calling 800-658-2330 or Minnesota Relay Service at 800-627-3529 or by using your preferred relay service.

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