Web Design Tools (ITSE 1301)

Credit: 3 semester credit hours (2 hours lecture, 2 hours lab)



Prerequisite/Co-requisite:

Course Description

Designing and publishing Web documents according to World Wide Web Consortium (W3C) standards. Emphasis on optimization of graphics and images and exploration of the tools available for creating and editing Web documents.

Required Textbook and Materials

- 1. New Perspectives on Creating Web Pages with HTML, XHTML, and XML; by: Patrick Carey; 3/E
 - a. ISBN number is 13: 9780495806400
- 2. USB Flash Memory drive
- 3. Access to Text Editor (Notepad++, Textpad), Photoshop, File Transfer Protocol(FTP) program,
- 4. Web Hosting provider

Course Objectives

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

- 1. Develop Web pages using industry standard software (SCANS:C5, C6, C8, C9, C19, F1, F2, F3, F9)
- 2. Develop and manage a website (SCANS: C5, C6, C8, C9, F9)
- 3. Identify how the Internet functions with specific attention to the World Wide Web and file transfer (SCANS: C5, C6, C8, C9, F2, F3, F9)

SCANS Skills and Competencies

Beginning in the late 1980's, the U.S. Department of Labor Secretary's Commission on Achieving Necessary Skills (SCANS) conducted extensive research and interviews with business owners, union leaders, supervisors, and laborers in a wide variety of work settings to determine what knowledge workers needed in order to perform well on a job. In 1991 the Commission announced its findings in *What Work Requires in Schools*. In its research, the Commission determined that "workplace know-how" consists of two elements: foundation skills and workplace competencies.

Course Outline

- A. Software
 - 1. Install Text Editing Program(s)
 - 2. Install FTP Client
 - 3. Research Web Hosting sites
- B. The Internet and the World Wide Web
 - 1. Evolution of the Internet
 - 2. Internet, Intranets, and Extranets
 - 3. Web Standards
 - 4. Internet Protocols

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- 5. URLs and Domain Names
- 6. Markup Languages

C. XHTML Basics

- 1. HTML or XHTML
- 2. Document Type Definition
- 3. Body and Text Basics
- 4. List Basics
- 5. Text Formatting
- 6. Hyperlinks
- 7. Validation

D. CSS

- 1. Advantages of CSS
- 2. Types of Cascading Style Sheets
- 3. Using Color on Web Pages
- 4. Configuring Text with CSS
- 5. Class and Id Selectors
- 6. Div and Span Elements
- 7. External Style Sheets
- 8. CSS Validation

E. Visual Elements & Graphics

- 1. Lines and Borders
- 2. Types of Graphics, GIFs, JPGs, SWFs
- 3. Using Graphics
- 4. Image Maps
- 5. Advanced Techniques: Image Slicing

F. Web Design

- 1. Web Site Organization
- 2. Site Navigation
- 3. Design Principles
- 4. Web Page Design—Best Practices
- 5. Page Layout Design Techniques
- 6. Text Design
- 7. Graphic Design
- 8. Design to Provide Accessibility

G. Page Layout with CSS

- 1. CSS Page Layout Overview
- 2. CSS Positioning Properties
- 3. Relative and Absolute Positioning

- 4. Float Property
- 5. Z-Indexes

H. More on Links, Lists & Layout

- 1. CSS Pseudo-classes and Links
- 2. CSS Navigation Layout Using Lists
- 3. Drop Down Menus

I. Tables

- 1. Using Tables on Web Pages
- 2. Overview of an XHTML Table
- 3. Table Headings, Captions & Attributes
- 4. Page Layouts using Tables
- 5. CSS to Style a Table

J. Forms

- 1. Overview of Forms
- 2. Using Forms
- 3. Form Enhancements
- 4. CSS to Style a Form
- 5. CGI Server-Side Processing

K. Web Site Development

- Large-Scale Project Development
- 2. Development Process

L. Multimedia & Interactivity

- 1. Applications and Plug-ins
- 2. Multimedia File Types
- 3. Sound on a Web Page
- 4. Podcasting
- 5. Video on a Web Page
- 6. Browser Compatibility and Accessibility
- 7. Flash
- 8. JavaScript

M. E-Commerce

- 1. Electronic Data Interchange
- 2. E-Commerce Security
- 3. Order and Payment Processing

N. Promotion for Web Developers

1. Components of a Search Engine

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- 2. Designing Your Pages for Promotion
- 3. Listing in a Search Engine and Search Index
- 4. Other Web Site Promotion Activities
- O. A Brief Look at JavaScript
 - 1. Overview of JavaScript

- 2. Popular Uses for JavaScript
- 3. Adding JavaScript to a Web Page
- 4. Document Object Model Overview
- 5. Events and Event Handlers
- 6. Variables
- 7. Introduction to Programming Concepts

Grade Scale

90 - 100	A
80 - 89	В
70 - 79	C
60 - 69	D
0 - 59	F

Course Evaluation

Final grades will be calculated according to the following criteria:

1. Daily work	40%
2. Class Participation	10%
3. Test & Final	50%

Course Requirements

- 1. A grade of 'C' or better must be earned in this course for credit toward degree requirement.
- 2. Pass W3 Schools HTML Certification
- 3. Display proper design techniques
- 4. Display understanding of proper HTML/XHTML syntax

Course Policies

- 1. No food, drinks, or use of tobacco products in class.
- 2. Beepers, telephones, headphones, and any other electronic devices must be turned off while in class.
- 3. Do not bring children to class.
- 4. No late assignments will be accepted. Any assignment submitted after the BlackBoard cut-off time will result in a '0'.
- 5. **Tests**. Students that miss a test are not allowed to make up the test. Students that miss a test will receive a grade of '0'.

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- 6. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an 'F' in the course.
- 7. Test will be closed book/note and will test information in assigned chapters and material discussed in class.
- 8. All assignments will be completed using either Blackboard. Assignment may NOT be submitted via email
- 9. The materials for this course are mandatory. A student not acquiring these materials will not be able to PASS this course.
- 10. Data files can be located on the CD provided with the textbook or on the publisher's resource website or under the download section in BlackBoard.
- 11. **Attendance**: Students should be present and punctual for all classes. Two absences are allowed. The first absence incurred after the initial two absences will result in the loss of one letter grade. Each absence after that will result in deducting half a letter grade from your overall grade.
- 12. **Tardiness**: If tardy, enter quietly and do not disturb the class. Students that are tardy or miss a class are responsible for all work and/or discussion missed. The student is responsible to obtain missed material from a classmate. **Do not expect your instructor to repeat a lecture & do not interrupt your instructor.**
- 13. Do not talk, type, or print while the instructor is talking to the class or when a student is asking a question that pertains to the class.
- 14. Refrain from "surfing" the Web during class, unless directed by your instructor.

Disabilities Statement

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building.

Course Schedule

Refer to Blackboard or MyITlab for actual assignments and due date

Week of	Topic	Reference
Week 1	Course introduction and policies Blackboard Navigation	
Week 2	HTML Basics/Adding Code Graphics & Links	Chapter 1

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Week 3	Tables & Style Sheets First Test	Chapter 2
Week 4	Library Items Templates	Chapter 3
Week 5	Frames & Forms	Chapter 4
Week 6	Interactivity & Site Management	Chapter 5
Week 7	Second Test Start Mid-Term Project	Chapter 6
Week 8	Adding Accessibility	Chapter 7
Week 9	Layers	Chapter 8
Week 10	Third Test Java Script	Chapter 9
Week 11	Creating your own Domain	In Class Lecture
Week 12	Web Server Technologies	In Class Lecture
Week 13	Certification Practice	
Week 14	Start Final Project	
Week 15	Final Project Work Week	
Week 16	Final Exam/Certification	

Contact Information:

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