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Course Outline for CIS 69

WEB DESIGN TECHNOLOGIES/TOOLS

Effective: Spring 2014

I. CATALOG DESCRIPTION:
CIS 69 — WEB DESIGN TECHNOLOGIES/TOOLS — 2.00 units

A survey of the languages and tools used to author Web pages. Introduction to the basics of HTML/XHTML and Cascading Style Sheets (CSS) and explains how to develop basic Web pages using Dreamweaver authoring tool. Learn how to create and manipulate images and animation with Adobe Photoshop, ImageReady, Fireworks, and Flash. Add interactivity to your Web pages using Javascript and DHTML. Students will create many different applications ranging from simple Web pages that link to other Web pages, animations that run within a Web page, and JavaScript programs that interact with visitors to a Web site.

2.00 Units Lecture

Strongly Recommended
CIS 59 - Web Dev: HTML/CSS/Javascript

Grading Methods:
Letter or P/NP

Discipline:

	MIN
Lecture Hours:	36.00
No Unit Value Lab	18.00
Total Hours:	54.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

Before entering this course, it is strongly recommended that the student should be able to:

A. CIS59

IV. MEASURABLE OBJECTIVES:

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

A. Create basic web pages using hypertext links to other URLs, insert graphic images; change and modify fonts and colors for the web page text, insert basic sound capability;
B. Use an HTML editor, graphics image editor, and special effects applications to speed development of the web page tag code and enhance web page presentation;
C. Discuss the role of web browsers, client side processing, server side processing;
D. Discuss the many information formats of the Web, and use them in the Web site;
E. Use File Transfer capability to send web pages source code to a distant web server to maintain a web page.

V. CONTENT:
A. XHTML
1. Intro to XHTML
2. XHTML Document Type Definitions (DTDs)
3. XHTML Elements and Attributes
4. Basic Body Elements
5. Linking Web Pages
6. Adding Images to your web pages
7. Creating lists
8. Working with frames
9. Creating tables
10. Building forms

B. Dreamweaver
1. The Dreamweaver workspace
2. Changing Views
3. Text Properties
4. Hyperlinks

5. Page Properties
6. Tables
7. Images on the Web : Image maps and rollovers
8. Web Site layout with layers and frames
9. Dreamweaver support for multimedia
10. Style sheets increase productivity
11. Simple animation with DHTML

C. Photoshop and ImageReady
1. Creating, editing, saving, and optimizing images
2. Animating images
3. Creating rollover effects
4. Creating image maps

D. Flash
1. The Flash environment
2. Selecting and modifying lines, curves, and shapes
3. Using the Timeline, Frames, and Layers
4. Using the Timeline to Test an animation
5. Understanding symbols and the library
6. Special Layers
7. Using Buttons, Actions, and Sounds

E. Fireworks
1. Fireworks Editing Tools
2. Selection Tools
3. Bitmap and Vector Tools
4. Creating an Image Map
5. Slicing Images for the Web
6. Buttons and Menus
7. Creating Animations

F. Cascading Style Sheets
1. Introducing Cascading Style Sheets (CSS)
2. Combing CSS rules with HTML
3. Basic selection techniques
4. Understanding CSS measurement units
5. Using CSS font properties
6. Working with color, color basics

G. JavaScript
1. The JavaScript Programming Language
2. Adding JavaScript to HTML documents
3. Working with variables
4. Working with functions
5. Understanding events
6. Data types
7. Expressions and Operators
8. Strings
9. Decision making: if statements
10. Repetition: while, do..while, for statements

H. Dynamic HTML and Animation
1. Document Object Model
2. Image Object
3. Using JavaScript and CSS Styles
4. CSS Positions
5. Cross-Browser compatibility

VI. METHODS OF INSTRUCTION:
A. **Lecture** -
B. Classroom discussion in basic concept and skills
C. Read text and other supplemental sources (example, Internet sites)
D. Computer demonstrations with overhead display panel
E. Discussion boards
F. Lab experience: hands-on lab assignments and web design projects
G. PowerPoint presentations
H. Chat rooms
I. Hands-on exploration of software tools utilizing computers

VII. TYPICAL ASSIGNMENTS:

A. Lecture a) Optimizing and saving animations b) Adding Javascript to an HTML document B. Reading a) Read the chapter on Introducing Cascading Style Sheets b) Read the U.S. Department of Labor Bureau of Labor Statistics Occupational Outlook Handbook Web Developer jobs C. Hands-on lab assignment, such as: a) Use Notepad to create a HTML document b) Find web sites that explain HTML tags c) Find a web site and save and print its source code d) Upload your web page to a web lost

VIII. EVALUATION:
A. **Methods**

1. Exams/Tests
2. Quizzes
3. Class Participation
4. Lab Activities
5. Other:
    a. Methods
        1. Quizzes, examinations (mid-term, final)
            a. Typical questions: Objective
                1. If you create a three-rollover menu on a Web page, how many graphic files would be required to upload to your website?
                    1. 3
                    2. 6
                    3. 7

4. 9

2. Vector image files are _____
    1. stored in the form of pixels
    2. are best for storing photographs with many colors
    3. tend to be larger than bitmap image files
    4. are stored in the form of equations

2. Weekly lab assignments to reinforce and demonstrate mastery of software
3. Relevant active participation

B. **Frequency**

1. Frequency
    a. Two to three quizzes, examinations (mid-term, final)
    b. Weekly hands-on lab assignments to reinforce and demonstrate mastery of the various tools

IX. TYPICAL TEXTS:

1. Gosselin, Don *The Web Warrior Guide to Web Design Technologies*.., Course Technology, 2003.
2. Deitel, Deitel & Goldberg *Internet & World Wide Web: How to Program*., Prentice Hall, 2003.

X. OTHER MATERIALS REQUIRED OF STUDENTS:

A. Mobile storage device: zip disk, flash drives, CD RW
B. Access to the World Wide Web with any major Web browser