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Course Outline for CIS 59B

WEB DEV: DHTML/XHTML,CSS,JAVA

Effective: Fall 2005

I. CATALOG DESCRIPTION:
CIS 59B — WEB DEV: DHTML/XHTML,CSS,JAVA — 2.00 units

An expansion of HTML web authoring capabilities that includes Dynamic HTML/XHTML, cascading style sheets, and JavaScript. This course is designed to offer students a case-oriented, problem-solving approach to learning beyond the basics of HTML/XHTML. Students will quickly review all the most important topics of HTML/XHTML, from the basics of creating Web pages with graphics and links, using tables, and controlling page layout with frames, to study more advanced topics, including cascading style sheets, programming with JavaScript and JavaScript objects and events, creating a multimedia Web page, creating a Web page with forms, working with dynamic content and layout, controlling mouse and keyboard events, and creating new frames and windows.

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: 2

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 various controls in JavaScript such as push buttons, pull down menus lists, tests boxes, radio buttons, checkbox buttons
B. Use HTML/XHTML form tags
C. Alter graphics effects and font presentations using DHTML/XHTML
D. Embed an applet in the HTML codes using tag
E. Use File Transfer capability to send web pages source code to a distant web server to maintain a web page
F. Explain and apply the basic and advanced concepts of HTML/XHTML programming
G. Explain and apply the fundamental concepts of scripting
H. Define and use decision and repetition structures in JavaScript
I. Use operators and functions using XHTML/JavaScript syntax and logic
J. Define and use dynamic data structures using XHTML/JavaScript
K. Define and explain trends in XHTML/JavaScript standards
L. Write, compile, test and debug scripts within an XHTML document
M. Define and use data types and variables in JavaScript
N. Define and use arrays in JavaScript
O. Define and use inheritance mechanisms in Cascading Style Sheets (CSS)
P. Define and use user interfaces using the XHTML form tags
Q. Define and use file Input/Output (I/O) in JavaScript
R. Develop and use event-driven applications (XHTML, form tags, JavaScript)
S. Embed one CSS within JavaScript

V. CONTENT:
A. Cascading Style Sheets
1. Learn about the history and theory of cascading style sheets
2. Create inline styles, embedded styles, and style sheets

3. Understand style precedence and style inheritance
4. Use cascading style sheets to format the appearance of paragraphs, lists, and headers
5. Design a style for hyperlinks in their four conditions
6. Define document content with the CLASS and ID properties and create styles for them
7. Mark document content with the
8. and tags and create styles for them.
9. Use cascading styles to control page layout

B. Working with DHTML/XHTML
1. Arrange objects using CSS positioning attributes
2. Learn about the history and theory of DHTML/XHTML
3. earn how DHTML/XHTML is implemented on different browsers
4. Work with cross-browser DHTML/XHTML pages
5. Create and link to an API of customized JavaScript functions.
6. Arrange objects using JavaScript
7. Create an animation using JavaScript

C. Programming with JavaScript
1. Learn about the features of JavaScript
2. Send output to a Web page
3. Working with variables and data
4. Working with expressions and operators
5. Create a JavaScript function
6. Work with arrays and conditional statements
7. Learn about program loops

D. File Transfer
1. Find a web space host
2. Use of index.html file
3. Upload of XHTML document to web space host
4. Security aspects of web pages

VI. METHODS OF INSTRUCTION:
A. **Lecture** -
B. Hands-on step by step assignment laboratory assignments using the WWW
C. Reading assignments and student research on the web
D. Lab presentation and classroom demonstration
E. Classroom discussion

VII. TYPICAL ASSIGNMENTS:
A. Read next chapter in preparation for lecture B. Hands-on lab assignment, such as: 1. You work as a web author at WebWorld Graphics. You have been asked to create a web site for the Willet Creek golf course. Part of the web site will be a preview of each of the 18 holes with hole statistics and shot recommendations. The current web pages have been stored in18 files named H01txt.htm thru H18txt.htm. You decide to create an external style sheet so that you can easily edit the appearance of these 18 web pages.

VIII. EVALUATION:
A. **Methods**

1. Exams/Tests
2. Quizzes
3. Projects
4. Class Participation
5. Lab Activities
6. Other:
    a. Methods
        1. Quizzes and final examination
            a. Typical questions:
                1. The introduction of CGI scripts changed the way that the Web was used because
                    1. of the ability to maintain customer databases
                    2. customers acquire the ability to locate and purchase merchandize online
                    3. it allowed computer users to access a company's customer support database
                    4. All of the above
                2. Which is NOT a JavaScript object
                    1. window
                    2. document
                    3. mouse
                    4. navigator
        2. Graded hands-on lab assignments
        3. Web site evaluation
        4. Attendance and participation

B. **Frequency**

1. Frequency
    a. Weekly laboratory exercises (8 total)
    b. Term project
    c. Quizzes
    d. Midterm examination
    e. Final examination

IX. TYPICAL TEXTS:
1. Carey *New Perspectives on Creating Web Pages with XHTML and Dynamic HTML - Comprehensive*., Course Technology, 2004.
2. Barksdale, Turner *HTML & JavaScript Programming Concepts*., Course Technology, 2004.

X. OTHER MATERIALS REQUIRED OF STUDENTS:
A. Mobile Storage: Zip disk, USB drive, CD/RW
B. Access to the World Wide Web with any major Web browser