Las Positas College
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Course Outline for CIS 59

WEB DEV: HTML/CSS/JAVASCRIPT

Effective: Spring 2018

I. CATALOG DESCRIPTION:
CIS 59 — WEB DEV: HTML/CSS/JAVASCRIPT — 3.00 units

This course will provide a fundamental understanding of the methods and techniques of developing a simple to moderately complex web site. Topics include: creating webpages with current standard webpage language (HTML), cascading style sheets (CSS), and Javascript. Exploration of incorporating images, audio/visual media, and interactive tools like forms and image maps. This course prepares apprentice Web developers to identify the information needs of a client, design appropriate WWW solutions, and implement them.

2.50 Units Lecture 0.50 Units Lab

Strongly Recommended
CIS 50 - Intro to Computing Info Tech

Grading Methods:
Letter or P/NP

Discipline:
- Computer Information Systems

	MIN
Lecture Hours:	45.00
Lab Hours:	27.00
Total Hours:	72.00

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. CIS50
1. Solve common business problems using approporiate Information Technology applications and systems;
2. Demonstrate familiarity with the computing environment, including the hardware, operating system, the user interface, and applications;
3. Demonstrate the possible solution(s) for simple business applications by applying productivity tools including, word processing, spreadsheets, databases, and presentation software;
4. Describe the capabilities, use, and characteristics of programming languages in a computer environment.

IV. MEASURABLE OBJECTIVES:

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

A. Create basic web pages using hypertext markup language (HTML), cascading style sheets (CSS) and Javascript;
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. Using Javascript coding techniques to create interactive web pages, form validation;
E. Use File Transfer capability to send web pages source code to a distant web server to maintain a web page.

V. CONTENT:
A. Introduction to the Internet and World Wide Web
1. Networks
2. Web pages and Web servers
3. History of HTML
B. HTML Basics
1. Using texteditor to enter HTML tags
2. Structure of an HTML document
3. Displaying an HTML file
C. Configuring Color and Text with CSS
1. Overview of Cascading Style Sheets
2. Inline CSS with the Style Attribute

3. Embedded CSS with the Style Element
4. Using External Style Sheets

D. Visual Elements and Graphics
1. Configuring Lines and BordersL
2. Types of Graphics
3. Image Element

E. Web Design
1. Design for Your Target Audience
2. Website Organization
3. Principles of Visual Design

F. Web Multimedia and Interactivity
1. Plug-Ins, Containers, and Codecs
2. Getting Started with Audio and Video
3. Adobe Flash

G. JavaScript and jQuery
1. Overview of JavaScript
2. The Development of JavaScript
3. Adding JavaScript to a Web Page
4. Document Object Model Overview

VI. METHODS OF INSTRUCTION:

A. **Lecture** -
B. Classroom discussion
C. Computer demonstrations with overhead display panel
D. Discussion boards
E. Lab experience: hands-on lab assignments and web design projects
F. PowerPoint presentations
G. Read text and other supplemental sources (example, Internet sites)

VII. TYPICAL ASSIGNMENTS:

A. Lecture
1. Creating headings, paragraphs, and lists
2. Adding Javascript to an HTML document

B. Reading
1. Read the chapter on Introducing Working with Fonts, Colors, and Graphics
2. Read the U.S. Department of Labor Bureau of Labor Statistics Occupational Outlook Handbook Web Developer jobs

C. Hands-on lab assignment, such as:
1. Use Notepad to create a HTML document
2. Find web sites that explain HTML tags
3. Find a web site and save and print its source code
4. Upload your web page to a web lost

VIII. EVALUATION:

A. **Methods**

1. Exams/Tests
2. Quizzes
3. Class Participation
4. Lab Activities

B. **Frequency**

1. Two to three theory quizzes per semester
2. Mid-term exam (optional) project or theory per semester
3. Final exam (required) project or theory per semester
4. Weekly hands-on lab assignments to reinforce and demonstrate mastery of the various tools

IX. TYPICAL TEXTS:

1. Patrick, Carey. *New Perspectives on HTML and CSS: Comprehensive.* 7th ed., Course Technology, 2017.
2. Felke, Terry. *Web Development & Design Foundations with HTML5.* 8th ed., Pearson, 2017.
3. Vodnik, Sasha. *HTML5 and CSS3, Illustrated Complete.* 2st ed., Cengage, 2017.

X. OTHER MATERIALS REQUIRED OF STUDENTS:

A. Mobile storage device: flash drives, external hard drive, cloud storage
B. Access to the World Wide Web with any major Web browser