

FOLSOM CORDOVA UNIFIED SCHOOL DISTRICT

**Course Outline
Fundamentals of Web Design**

Date: March 2004

Subject Area: Technology

Proposed Grade Level(s): 9-12

Course Length: 1 Semester

Grading: A-F

Number of Credits: 5

Prerequisites: None

BRIEF COURSE DESCRIPTION:

Introduction to Web Design focuses on the overall production processes with particular emphasis on design elements involving layout, navigation and interactivity. Labs will be included covering Adobe Photoshop 6, Illustrator 9, Premiere 6, GoLive 6, LiveMotion 1, Adobe Studio 1.

GENERAL GOALS/PURPOSES:

Upon completion of this course, students will be able to:

- Design web site architecture, workflow patterns, and production processes.
- Understand the principles of graphic and content creation for online media.
- Utilize fundamental online graphic design principles including appropriate interactivity, content sensitive navigation schemes and user interface criteria.
- Employ task-appropriate software tool selection.
- Understand distinctive attributes of the web as a unique medium.
- Utilize web animation techniques.
- Implement and host a web site.
- Employ media skills necessary to become a web designer either as an employee or freelance designer.

STUDENT READING COMPONENT:

Students will be required to read the course material online during every class period and at home if they fall behind the group.

STUDENT WRITING COMPONENT:

Student will be required weekly to write their responses to Labs and discussion questions in their Engineering Journal.

STUDENT ORAL COMPONENT:

Students will be required to discuss topics in the course with the class and within their groups. There is also an oral Final Presentation at the end of the Semester.

DETAILED UNITS OF INSTRUCTION:

1. Foundations of Web Site Creation
 - 1.1 Course Overview
 - 1.2 Introduction to the Internet
 - 1.3 Internet Connectivity
 - 1.4 Browsers
 - 1.5 Browser Functions
 - 1.6 Other Internet Applications
 - 1.7 Plug-Ins
2. Web Page Elements
 - 2.1 Overview
 - 2.2 HTML Basics
 - 2.3 Color Formats
 - 2.4 Image Formats
 - 2.5 Multimedia Formats
 - 2.6 Interactive Elements
3. Production Tools
 - 3.1 HTML and Interactive Formats
 - 3.2 HTML and Interactive Editors
 - 3.3 Graphics Formats
 - 3.4 Graphics Applications
 - 3.5 Multimedia Formats
 - 3.6 Multimedia Applications
4. Pre-Production Process
 - 4.1 Project Definition
 - 4.2 Functional Requirements
 - 4.3 Content and Media Assets
 - 4.4 Production Milestones
5. Layout and Design
 - 5.1 The Web as a Medium
 - 5.2 Basic Design Principles
 - 5.3 Web Design Issues
 - 5.4 Separation of Content and Format
 - 5.5 Other Design Issues
6. User Interface Design
 - 6.1 Definition
 - 6.2 Site Identity Design
 - 6.3 Usability
 - 6.4 Navigation
 - 6.5 Effective Navigation
7. Accessibility Considerations
 - 7.1 Disability Accessibility Guidelines
 - 7.2 Localization
8. Media Creation
 - 8.1 Web Writing
 - 8.2 Image Creation
 - 8.3 Image Manipulation
 - 8.4 Animation
 - 8.5 Animated GIF
 - 8.6 SWF Animation
 - 8.7 Digital Audio and Video
9. Interactivity

- 9.1 Appropriate Interactivity
- 9.2 Interactive Elements
- 9.3 Interactive Multimedia
- 9.4 Advertisement
- 9.5 Online Forms
- 10. Testing and Optimization
 - 10.1 Site Review
 - 10.2 Error Checking
 - 10.3 Speed Optimization
 - 10.4 Site Management
 - 10.5 Site Maintenance
 - 10.6 Usability Testing
- 11. Implementation and Hosting
 - 11.1 Client Sign-off
 - 11.2 Legal Review
 - 11.3 ISP Requirements
 - 11.4 Domain Name Registration
 - 11.5 File Publishing to the Web
 - 11.6 Site Advertising
- 12. Course Project

THIS COURSE WILL PREPARE STUDENTS FOR THE HSEE AND/OR FCUSD EXIT EXAMS IN:

Language Arts

LAB FEE, IF REQUIRED: None

SUBJECT AREA CONTENT STANDARDS TO BE ADDRESSED:

Challenge Standards, Business Education: Computer Science and Information Technology # 4.1, 4.2, 4.3,

DISTRICT ESLRs TO BE ADDRESSED:

- **Self-Directed Learners:** Success in this class will require students to independently monitor their progress in a variety of activities and determine the next steps and direction needed to complete assigned work.
- **Effective Communicators:** Written and oral projects will be required describing students' understanding of the Web page concepts, design process, problems which occurred, and how the problems were resolved.
- **Quality Producers/Performers:** Students will demonstrate successful performance with two culminating assessments: the AP exam and producing a complex program, which works as specified in the design document and without errors.
- **Constructive Thinkers:** Students will observe and analyze web pages designed by others and identify the positive and negative attributes of a web page, which will develop students' problem-solving skills.
- **Collaborative Workers:** Students will work in teams to produce quality web pages and identify problems with some one else's web page.
- **Responsible Citizens:** Students will share their knowledge with teachers by designing a web page per the teacher's requirements.