### CS 50.21A Course Outline as of Fall 2009

## **CATALOG INFORMATION**

Dept and Nbr: CS 50.21A Title: WEBPAGE DESIGN WITH CSS Full Title: Webpage Design with Cascading Style Sheets and Graphics

Last Reviewed: 11/8/2010

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	1.50	Lecture Scheduled	1.00	17.5	Lecture Scheduled	17.50
Minimum	1.50	Lab Scheduled	0	8	Lab Scheduled	0
		Contact DHR	1.50		Contact DHR	26.25
		Contact Total	2.50		Contact Total	43.75
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 35.00 Total Student Learning Hours: 78.75

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: CIS 58.53A

### **Catalog Description:**

Create design elements for a mock client Web site using HTML (hypertext markup language), CSS (cascading style sheets), and graphics. Topics include: Web site templates, color palettes, background images, text and font, navigational design, Web graphic formats, compression, image creations and editing.

### **Prerequisites/Corequisites:**

Course Completion of CS 50.11B (or CIS 58.51B or CIS 84.42B)

### **Recommended Preparation:**

APGR 72 AND CIS 73.21 AND ENGL 100 or ESL 100; OR APGR 72 AND CS 70.11A AND ENGL 100 or ESL 100

#### **Limits on Enrollment:**

### **Schedule of Classes Information:**

Description: Create design elements for a mock client Web site using HTML (hypertext markup language), CSS (cascading style sheets), and graphics. Topics include: Web site templates, color palettes, background images, text and font, navigational design, Web graphic formats, compression, image creations and editing. (Grade or P/NP)

Prerequisites/Corequisites: Course Completion of CS 50.11B (or CIS 58.51B or CIS 84.42B) Recommended: APGR 72 AND CIS 73.21 AND ENGL 100 or ESL 100; OR APGR 72 AND

CS 70.11A AND ENGL 100 or ESL 100

Limits on Enrollment: Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

# **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

AS Degree: Area Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

**IGETC:** Transfer Area Effective: Inactive:

**CSU Transfer:** Transferable Effective: Fall 1996 Inactive: Fall 2015

**UC Transfer:** Effective: Inactive:

CID:

# Certificate/Major Applicable:

Certificate Applicable Course

# **COURSE CONTENT**

## **Outcomes and Objectives:**

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

- 1. Compile and use the software required to design a web site.
- 2. Design effective web sites with consistent and pleasing look and feel, easy-to-use navigation, consistent visual and navigational elements, and branding.
- 3. Analyze template CSS code and modify it to create a new site.
- 4. Compare and contrast the strengths of the JPEG (Joint Photographic Experts Group), GIF (Graphic Interchange Format), and PNG (Portable Network Graphics) formats.
- 5. Choose the appropriate graphic file type for specific applications.
- 6. Create a color palette for a Web site using color and graphics.
- 7. Apply techniques to edit poor quality images.
- 8. Use filters and special effects.
- 9. Produce a functional navigational interface for a web site.
- 10. Make use of Web resources for current information on web design and web graphics.

# **Topics and Scope:**

- 1. Software Requirements
- a. XHTML (eXtended HTML) and CSS editors
- b. Graphics programs
- c. Shareware graphics programs
- d. FTP (File Transfer Protocol) software "Fugu" or "SSH Client" (Secure SHell)
- 2. Web Design Principles
- a. Critiquing existing web sites
- b. Using color and graphics to establish a look and feel.
- c. Elements of effective navigation

- d. Establishing site consistency
- e. Using logos and text to establish effective branding
- 3. CSS and XHTML
  - a. Review of CSS and XHTML
  - b. Principles of Web page layout and site architecture using CSS and XHTML
- 4. Using a template
- a. Downloading
- b. Analyzing
- c. Modifying
- d. Uploading
- 5. Graphics formats and compression Portable Network Graphics (PNG) formats
- a. Joint Photographic Experts Group (JPEG)
- b. PNG
- c. Transparency
- 6. Using CSS to apply color
- 7. Image editing
- a. Downloading
- b. Resizing
- c. Cropping
- d. Unusual cropping
- e. Using filters
- f. Applying effects
- g. Selecting background
- 8. Using CSS to control text
- a. Effective headings
- b. Formatting body text
- c. Principles of text formatting
- d. Text sizing absolute vs relative
- 9. Using CSS and or graphics to modify navigation
- a. CSS of horizontal navigation bars
- b. Creating images for navigation bars
- c. Using CSS to create linked text effects
- 10. Compiling Web resources in the areas of
- a. Web design principles
- b. CSS
- c. XHTML
- d. Graphics
- e. Color

## **Assignment:**

- 1. Evaluate three existing templates in terms of color, layout, navigation, text and graphics
- 2. Upload template files onto the Web server
- 3. Digitize a photo, save the file at various levels of the PNG and JPEG format
- 4. Create a transparent GIF and PNG
- 5. Modify web page template to create a multi-page site, which contains the following elements:
  - a. Site color scheme
  - b. Site name and page name
  - c. Navigation
  - d. Formatted text
  - e. Graphics for site structure
  - f. Content images

- 6. Evaluate classmates work regarding color, line, layout, navigation and graphics
- 7. Contribute web resources to class resource page in the areas of design, CSS, XHTML, image creation and image editing.
- 8. Quizzes

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.

Writing 0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Place graphics and upload web files to server

Problem solving 20 - 40%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Class performances

Skill Demonstrations 40 - 50%

**Exams:** All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items

Exams 20 - 35%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

None

Other Category 0 - 0%

### **Representative Textbooks and Materials:**

"Designing Web Graphics-version 4", by Lynda Weinman - New Riders 2007