

CS 50A Course Outline as of Fall 2014**CATALOG INFORMATION**

Dept and Nbr: CS 50A Title: WEB DEVELOPMENT 1

Full Title: Web Development 1

Last Reviewed: 10/24/2022

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	4	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 157.50

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:

Catalog Description:

This course is intended for the beginning student who will learn how to build a simple website using HTML and CSS. Topics include: font formatting, navigation, images, layout, semantic elements, tables and forms

Prerequisites/Corequisites:**Recommended Preparation:**

Course Completion of CS 5 or CS 101A or CS 105; AND Course Eligibility for ENGL 1A

Limits on Enrollment:**Schedule of Classes Information:**

Description: This course is intended for the beginning student who will learn how to build a simple website using HTML and CSS. Topics include: font formatting, navigation, images, layout, semantic elements, tables and forms. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Course Completion of CS 5 or CS 101A or CS 105; AND Course Eligibility for ENGL 1A

- b. Links using complete URLs (Uniform Resource Locators)
- c. Links to id's within a webpage
- d. Navigation bars
- e. Validating HTML (HyperText Markup Language) code to the HTML 5 standard
- f. Email link

III. Structural Elements

- a. Strong
- b. Em
- c. Pre
- d. Blockquote
- e. Unordered Lists
- f. Ordered Lists
- g. Definition Lists
- h. Special Characters

IV. Images

a. Images sources - downloading from a website, digital camera, smart phones. Copyright overview

- b. Using the img element to insert images into a webpage
- c. The src, alt, height, and width attributes
- d. Joint Photographic Experts Group vs. Portable Network Graphics vs. Graphic Interchange

Format

- e. Using folders to organize a website
- f. Using image editing software to resize an image
- g. Linking thumbnail images to a web page

V. Cascading Style Sheets Usage

- a. Basic CSS rules : selector, property, value, declaration, style
- b. Inline, embedded, external and browser stylesheets
- c. Descendant and multiple selectors
- d. Inheritance
- e. The cascade
- f. Classes and id's

VI. CSS Font / Text Properties

- a. Font-family, font-size, font-weight, font-style, font-variant
- b. Text-align, text-transform, text-indent, text-decoration, color, background-color, line-height, letter spacing, word-spacing

VII. HTML Editors - download, use and review

VIII. CSS (Cascading Style Sheets) Box Properties

- a. Width
- b. Padding
- c. Border
- d. Margin
- e. Background-image
- f. Background-repeat
- g. Background-position
- h. Shorthand properties: padding, margin, border, background, and font

IX. Webpage layout using CSS

- a. Float
- b. Clear
- c. Wireframe
- d. Conversion of wireframe to web site
- e. Pseudo-classes
- f. Absolute positioning

- g. Responsive design
 - h. Z-index
- X. Semantic Elements
- a. conversion of div elements to semantic elements
 - b. header, nav, section, footer
 - c. Article, aside, time
 - d. CSS for screen and print
- XI. Tables
- a. Table element
 - b. Tr (table row)
 - c. Td (table data)
 - d. Th (table heading)
 - e. Summary
 - f. Caption
 - g. Border
 - h. Rowspan
 - i. Colspan
 - j. Styling a table using CSS
 - k. Nested tables
- XII. Forms
- a. Form
 - b. POST and GET commands
 - c. Input
 - 1) Text
 - 2) Submit
 - 3) Radio
 - 4) Checkbox
 - 5) Reset
 - 6) Hidden
 - d. Textarea
 - e. Select and option
 - f. Fieldset
 - g. Label
 - h. Layout of forms
 - i. Styling forms
 - j. Form processing using an existing CGI (Common Gateway Interface) script
 - k. Using hidden input elements to provide input to an existing CGI script
- XIII. Commercial Website
- a. Web hosting
 - b. Domain names
 - c. E-commerce

Assignment:

Required Assignments

1. 25 – 60 pages of textbook reading per week
2. 4 – 7 website projects. All webpages must be uploaded to the student.santarosa.edu server and must validate XHTML 1.0 strict. Each of the following must be included in at least one website project:
 - a. At least 5 pages
 - b. A standard navigation bar
 - c. Html, head, title, body, h1, h2, p, a, img, string, em, pre, br, q, blockquote, ol, ul, li, and

meta elements

- d. CSS to control border-bottom, background-color, font-family, font-size, font-weight, font-style, color, and text-decoration properties
 - e. The use of classes
 - f. Links using relative paths, links using complete URL's, and links to id's within a webpage
 - g. Thumbnails
3. At least 2 quizzes

Optional Assignments

- 1. Website critique(s)
- 2. Participation in electronic message board discussions

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.

Website critiques, participation in electronic message boards

Writing
0 - 20%

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

Website projects

Problem solving
30 - 70%

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

None

Skill Demonstrations
0 - 0%

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

Quizzes

Exams
20 - 50%

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

None

Other Category
0 - 0%

Representative Textbooks and Materials:

Basics of Web Design: HTML 5 and CSS3. Felke-Morris, Terry Ann. Addison-Wesley: 2012
Head First HTML and CSS (2nd). Robson, Elisabeth; Freeman, Eric. O'Reilly Media: 2012