

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

Dept and Nbr: CS 50B Title: WEB DEVELOPMENT 2

Full Title: Web Development 2

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: CS 50.11C

**Catalog Description:**

Combines hand-coded exercises in CSS code with Bootstrap, a front-end development tool. Students will expand their CSS skills as they format text, display images, layout pages, and create navigational systems. Bootstrap will provide the basis for an e-portfolio that is customized with hand coding.

**Prerequisites/Corequisites:**

Course Completion of CS 50A OR CS 50.11B

**Recommended Preparation:**

Eligibility for ENGL 1A or equivalent

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

Description: Combines hand-coded exercises in CSS code with Bootstrap, a front-end development tool. Students will expand their CSS skills as they format text, display images, layout pages, and create navigational systems. Bootstrap will provide the basis for an e-portfolio that is customized with hand coding. (Grade or P/NP)

Prerequisites/Corequisites: Course Completion of CS 50A OR CS 50.11B

Recommended: Eligibility for ENGL 1A or equivalent

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: Spring 2006 Inactive:

**UC Transfer:** Effective: Inactive:

**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

**Outcomes and Objectives:**

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

1. Describe the current status of CSS implementation across various browsers.
2. Analyze and modify an existing web site's HTML and CSS using a Browser Code Inspector.
3. Use Bootstrap to create an efolio site.
4. Create webpages, which are styled using HTML, CSS, and JavaScript.
5. Produce validated HTML and CSS documents.
6. Produce a file / folder structure that matches industry standards.
7. Apply the principles of the cascade, inheritance, pseudo classes, pseudo elements, and advanced selectors in CSS documents.
8. Produce an e-folio created using Bootstrap HTML, CSS and JavaScript with hand coded CSS modifications.
9. Demonstrate appropriate use of:
  - a. text/font properties
  - b. image properties - thumbnail galleries, carousels, hover effects, multiple background images.
  - c. layout using CSS
  - d. navigation - drop down, pop out, tabs, buttons, navigation bars
  - e. CSS transitions

**Topics and Scope:**

I. Overview

A. How Hyper Text Mark-up Language (HTML), Cascading Style Sheets (CSS), and JavaScript work together

B. Analysis of existing web sites using Browser Inspector

C. How to modify CSS in the browser

D. File / folder structure

- E. Bootstrap setup
- F. Current industry standards
- G. CSS styles and units
- II. CSS selectors
  - A. Advanced selectors
  - B. Pseudo classes
  - C. Pseudo elements
  - D. Attribute selectors
  - E. Document structure
- III. Structure and the cascade
  - A. Specificity
  - B. Inheritance
  - C. The cascade
- IV. Bootstrap efolio
  - A. Setup
  - B. Add page content
  - C. Modify existing CSS
  - D. Upload to server
- V. Fonts / Text
  - A. Google fonts
  - B. Text shadow
  - C. Vertical alignment
  - D. Base 10 font size
  - E. Modify CSS for e-folio implementing lesson concepts
- VI. Position
  - A. Thumbnail gallery
  - B. Float / clear
  - C. Position property
  - D. Modify CSS for e-folio implementing lesson concepts
- VII. Backgrounds
  - A. Background basics
  - B. Border radius
  - C. Box shadow
  - D. Gradients
  - E. Multiple backgrounds
  - F. Background hover effects
  - G. Modify CSS for e-folio implementing lesson concepts
- VIII. Images
  - A. Icons
  - B. Image treatment
  - C. Thumbnail gallery
  - D. Carousel
  - E. Image hover effects
  - F. Modify CSS for e-folio implementing lesson concepts
- IX. Layout
  - A. Fixed
  - B. Fluid
  - C. 2/3 column
  - D. Column backgrounds
  - E. Centering layouts
- X. Bootstrap layout
  - A. Responsive design

- B. Grid basics
- C. Change column distribution with screen size
- D. Hidden and visible columns
- E. Customize bootstrap
- F. Modify CSS for e-folio implementing lesson concepts

XI. Navigation

- A. Styling list to for a nav bar
- B. Images as navigation
- C. Drop down
- D. Pop out

XII. Bootstrap Navigation

- A. Tabs
- B. Buttons
- C. Pills
- D. Nav bars
- E. Drop down
- F. Breadcrumbs
- G. Pagination
- H. Next / Previous
- I. Modify CSS for e-folio implementing lesson concepts

**Assignment:**

1. Read approximately 30 pages per week from the textbook.
2. Take 1-2 exams.
3. Deconstruct existing webpages into HTML and CSS components.
4. Create 10-20 original webpages that contain hand-coded HTML and CSS.
5. Utilize Bootstrap HTML, CSS and Javascript to create an e-folio.
6. Modify Bootstrap HTML and CSS to create a customized webpage design.

**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 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.

Webpages and e-folio projects

Problem solving  
60 - 80%

**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.

Exams

Exams  
20 - 40%

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

None

Other Category  
0 - 0%

**Representative Textbooks and Materials:**

Stylin' with CSS: A Designer's Guide (3rd). Wyke-Smith, Charles. New Riders: 2012