#### 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	<b>Course Hours Total</b>	
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-folio 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-folio that is customized with hand coding. (Grade or P/NP) Prerequisites/Corequisites: Course Completion of CS 50A OR CS 50.11B

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

AS Degree: CSU GE:	Area Transfer Area	l		Effective: Effective:	Inactive: Inactive:
<b>IGETC:</b>	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. Create10-20 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.

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

Webpages and e-folio projects

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

Writing 0 - 0%

Problem solving
60 - 80%

Skill	Demonstrations	5
	0 - 0%	

None

Exams

**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

Exams 20 - 40%