CS 50B Course Outline as of Fall 2017

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:
This class offers advanced instruction instruction through project-based assignments in client-side Web development technology and design. Students use HTML5 and CSS3, as well as basic JavaScript coding with jQuery to create interactive user interfaces. Topics include working with frameworks such as Bootstrap; advanced CSS coding using language pre-processors; and an introduction to the WordPress Web Content Management System.

Prerequisites/Corequisites:
Course Completion of CS 50A

Recommended Preparation:
Eligibility for ENGL 1A or equivalent

Limits on Enrollment:

Schedule of Classes Information:
Description: This class offers advanced instruction instruction through project-based assignments in client-side Web development technology and design. Students use HTML5 and CSS3, as well as basic JavaScript coding with jQuery to create interactive user interfaces. Topics include working with frameworks such as Bootstrap; advanced CSS coding using language pre-

processors; and an introduction to the WordPress Web Content Management System. (Grade or P/NP)
Prerequisites/Corequisites: Course Completion of CS 50A
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:

			Effective:	Inactive:
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:
Both Certificate and Major Applicable

Approval and Dates

Version:	07	Course Created/Approved:	11/7/2005
Version Created:	11/21/2016	Course Last Modified:	6/3/2023
Submitter:	Jeff Diamond	Course last full review:	10/24/2022
Version Status:	Approved (Changed Course)	Prereq Created/Approved:	1/31/2023
Version Status Date:	2/27/2017	Semester Last Taught:	Spring 2023
Version Term Effective:	Fall 2017	Term Inactive:	Fall 2023

COURSE CONTENT

Student Learning Outcomes:
At the conclusion of this course, the student should be able to:
1. Use HTML, CSS, and frameworks that meets current industry standards to layout a site, create
    navigation, and control color and text.
2. Create a Content Management System (CMS) powered website that complies with current
    user-centered, user experience (UX) and responsive design best practices.
3. Understand current accessibility and validation standards and create content that adheres to
    these standards.
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 a frameworks standard such as Bootstrap to create a website.
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 content using current industry standard frameworks, 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. Exams (1 - 2)
3. Create ten to twenty original webpages that contain hand-coded HTML and CSS
4. Utilize Frameworks, HTML, CSS and JavaScript to create an e-folio
5. Modify Frameworks, HTML and CSS to create a customized webpage design
6. Create a Content Management System (CMS) website that complies with current industry standards

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
50 - 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.

Exams

Exams
20 - 40%

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

Participation, attendance

Other Category
10 - 20%

Representative Textbooks and Materials:
Beginning Responsive Web Design with HTML5 and CSS3. Fielding, Jonathan. Apress. 2014

OTHER REQUIRED ELEMENTS

STUDENT PREPARATION

Matric Assessment Required:	E	Requires English Assessment
Prerequisites-generate description:	A	Auto-Generated Text
Advisories-generate description:	A	Auto-Generated Text
Prereq-provisional:	N	NO
Prereq/coreq-registration check:	Y	Prerequisite Rules Exist
Requires instructor signature:	N	Instructor's Signature Not Required

BASIC INFORMATION, HOURS/UNITS & REPEATABILITY

Method of instruction:	02	Lecture
	72	Internet-Based, Delayed Interaction
	71	Internet-Based, Simultaneous Interaction
Area department:	CS	Computer Studies
Division:	72	Arts & Humanities
Special topic course:	N	Not a Special Topic Course
Program status:	1	Both Certificate and Major Applicable
Repeatability:	00	Two Repeats if Grade was D, F, NC, or NP
Repeat group id:		

SCHEDULING

Audit allowed:	Y	Auditable
Open entry/exit:	N	Not Open Entry/Open Exit
Credit by exam:	N	Credit by examination not allowed
Budget code: Program:	0000	Unrestricted
Budget code: Activity:	0701	Computer & Information Science

OTHER CODES

Discipline:		Computer Information Systems
Basic skills:	N	Not a Basic Skills Course
Level below transfer:	Y	Not Applicable
CVU/CVC status:	Y	Distance Ed is CVU/CVC Developed
Distance Ed Approved:	Y	Either online or hybrid, as determined by instructor
Emergency Distance Ed Approved:	Y	Fully Online
		Partially Online
		Online with flexible in-person activities
Credit for Prior Learning:	N	Agency Exam
	N	CBE
	N	Industry Credentials
	N	Portfolio
Non-credit category:	Y	Not Applicable, Credit Course
Classification:	Y	Career-Technical Education
SAM classification:	C	Clearly Occupational
TOP code:	0614.30	Website Design and Development
Work-based learning:	N	Does Not Include Work-Based Learning
DSPS course:	N	Not a DSPS Course

In-service: N Not an in-Service Course