

**CS 50.33 Course Outline as of Fall 2022****CATALOG INFORMATION**

Dept and Nbr: CS 50.33 Title: WEB PROJECTS

Full Title: Web Projects

Last Reviewed: 5/10/2021

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	4.00	Lecture Scheduled	4.00	17.5	Lecture Scheduled	70.00
Minimum	4.00	Lab Scheduled	0	8	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	4.00		Contact Total	70.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 140.00

Total Student Learning Hours: 210.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

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

Also Listed As:

Formerly:

**Catalog Description:**

This advanced project management course guides teams of web developers through the process of developing a web or mobile project for local clients. Topics include: Writing a proposal, user-centered design and research, content development, agile development practices, effective teamwork, communication skills, production techniques, client relations, project delivery and maintenance. Students will work in teams to develop a project for a client provided by the instructor. This course is the capstone experience for Web Development programs.

**Prerequisites/Corequisites:**

Completion or Current Enrollment in CS 50C

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

Description: This advanced project management course guides teams of web developers through the process of developing a web or mobile project for local clients. Topics include: Writing a proposal, user-centered design and research, content development, agile development practices,

effective teamwork, communication skills, production techniques, client relations, project delivery and maintenance. Students will work in teams to develop a project for a client provided by the instructor. This course is the capstone experience for Web Development programs. (Grade Only)

Prerequisites/Corequisites: Completion or Current Enrollment in CS 50C

Recommended:

Limits on Enrollment:

Transfer Credit: CSU;

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

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

<b>AS Degree:</b>	<b>Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>CSU GE:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>IGETC:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>CSU Transfer:</b>	Transferable	Effective: Fall 2022	Inactive:
<b>UC Transfer:</b>		Effective:	Inactive:

**CID:**

**Certificate/Major Applicable:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

### **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

1. Analyze workflow issues involved in the design and programming of a web or mobile project.
2. Create a communication plan that facilitates decision making and collaboration between a development team and their client.
3. Develop templates for a web or mobile project, including writing a proposal, developing agile project management process documentation, and documenting the lifecycle of a project.
4. Work effectively as a member of the agile development team to develop a web or mobile project.

### **Objectives:**

At the conclusion of this course, the student should be able to:

1. Develop goals, objectives and questions for meetings with clients.
2. Create a storyboard, timeline, work schedule, bid, and formal proposal for a web or mobile project.
3. Analyze existing web or mobile projects regarding: overall design, navigation, content, graphics and ease of use.
4. Discuss problems which arise when creating a web or mobile project and brainstorm possible solutions.

### **Topics and Scope:**

- I. Educating Clients

- A. Defining a web or mobile project
- B. Terminology
- II. Formulating Project Goals
  - A. Initial project proposal
  - B. Brainstorming and problem solving
  - C. Streamlining ideas
  - D. Facilitating goal setting
- III. Defining Target Users
  - A. Evaluating your audience
  - B. Developing user stories to capture project requirements from user-centered perspective
- IV. Managing Agile Project Process
  - A. Developing a project schedule
  - B. Defining group roles
  - C. Assigning and managing tasks for team members using sprint model
  - D. Incorporating a kanban process for task management
  - E. Working to keep client informed
- V. Tracking Project Resources
  - A. Project estimates
  - B. Determining customer budget
  - C. Estimated cost versus actual cost
  - D. Managing customer changes
- VI. Writing a Project Proposal
  - A. Putting it all together
  - B. Goals
  - C. Research
  - D. Timeline
  - E. Budget
  - F. Contract
- VII. Communicating with the Customer and the Team
- VIII. Practicing User-Centered Design Development
  - A. Creating a user experience that attracts the target audience
  - B. Engaging in inspiration, ideation, and implementation methods
  - C. Applying best practices in interaction and visual design
- IX. Developing Content
  - A. Writing styles - learning what works in web and mobile
  - B. Type and style: make your words speak out
  - C. Animation
  - D. Video
  - E. Audio
- X. Testing the Project
  - A. Debugging
  - B. Beta testing with a sample audience
- XI. Presentation of Final Design to Client
  - A. Discuss maintenance
  - B. Publicizing project

**Assignment:**

1. Conduct client meetings to discuss client needs for project, client approval of proposal, client approval of design and beta release, final client approval and project maintenance
2. Create a formal proposal for a web or mobile project
3. Document work such as storyboard and timeline on the project and compare the initial

- proposal to the actual work completed
4. Research existing contracts and develop one which meets client needs
5. Use the Internet to research and develop appropriate written reports
6. Create a web or mobile project for a client
7. Critique other team projects regarding their: overall design, navigation, content, graphics and ease of use
8. Reading approximately 20-30 pages per week
9. Exams (6 - 8)
10. 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.

Written reports, such as formal proposal and document work

Writing  
10 - 20%

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

Storyboard, timeline, bid, project documentation and contract

Problem solving  
25 - 50%

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

Create a project based on client needs; critique of projects

Skill Demonstrations  
20 - 50%

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

Exams and quizzes

Exams  
15 - 40%

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

Attendance and participation

Other Category  
0 - 10%

### Representative Textbooks and Materials:

The Scrum Guide. Schwaber, Ken and Sutherland, Jeff. 2020  
 Scrum and XP from the Trenches. 2nd ed. Kniberg, Henrik. InfoQ. 2015 (classic)  
 The Field Guide to Human-Centered Design. IDEO.org. Design Kit. 2015 (classic)  
 Instructor prepared materials