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:

			Effective:	Inactive:
AS Degree:	**Area**		Effective:	Inactive:
CSU GE:	**Transfer Area**		Effective:	Inactive:
IGETC:	**Transfer Area**		Effective:	Inactive:
CSU Transfer:	Transferable	Effective: Fall 2022	Inactive:	
UC Transfer:		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