#### 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	<b>Course Hours Total</b>	
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:**

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

## **Approval and Dates**

Version: 01 Course Created/Approved: 5/10/2021 Version Created: 2/5/2021 Course Last Modified: 6/26/2023 Submitter: Ethan Wilde Course last full review: 5/10/2021 Approved New Course (First Version) **Version Status:** Prereq Created/Approved: 5/10/2021 Version Status Date: 5/10/2021 Semester Last Taught: Spring 2023

Version Term Effective: Fall 2022 Term Inactive:

### **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

## **OTHER REQUIRED ELEMENTS**

#### STUDENT PREPARATION

Advisories-generate description:

X Matric Assessment Required: **Exempt From Assessment** 

Prerequisites-generate description: U **User Generated Text** NA

Prereq-provisional: N NO

Prerequisite Rules Exist Prereg/coreq-registration check: Y

Requires instructor signature: N Instructor's Signature Not Required

### BASIC INFORMATION, HOURS/UNITS & REPEATABILITY

Method of instruction: 02 Lecture

> 72 Internet-Based, Delayed Interaction

No Advisory

Internet-Based, Simultaneous Interaction 71

CS **Computer Studies** Area department: Division: Arts & Humanities 72

Special topic course: N Not a Special Topic Course

Program status: Both Certificate and Major Applicable 1 Repeatability: Two Repeats if Grade was D, F, NC, or NP 00

Repeat group id:

#### **SCHEDULING**

Audit allowed: Y Auditable

Open entry/exit: N Not Open Entry/Open Exit

Credit by exam: Credit by examination not allowed N

Budget code: Program: Unrestricted 0000

Budget code: Activity: 0701 Computer & Information Science

#### **OTHER CODES**

Discipline: **Computer Information Systems** 

Basic skills: Not a Basic Skills Course N

Level below transfer: Y Not Applicable

CVU/CVC status: Y Distance Ed, Not CVU/CVC Developed

Distance Ed Approved: Y Exclusively online or other technology

based instruction

None

Emergency Distance Ed Approved: N

Credit for Prior Learning: N Agency Exam

> **CBE** N

**Industry Credentials** N

Portfolio N

Non-credit category: Y Not Applicable, Credit Course Classification: Y Career-Technical Education

SAM classification:  $\mathbf{C}$ Clearly Occupational

0614.30 Website Design and Development TOP code:

Work-based learning: Does Not Include Work-Based Learning N

DSPS course: Not a DSPS Course N

In-service: N Not an in-Service Course