

CS50.33: Web Projects

Section 4210, Spring 2024 Course Syllabus

**Instructor:** Ethan Wilde (he/him/his), [ewilde@santarosa.edu](mailto:ewilde@santarosa.edu)

## Course 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

*This course section is specifically designed for Web Development program students. You will become a member of a professional web development team working on a project for a real client in this class.*

## Student Learning Outcomes

**Students will 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.

**Upon completion of the course, students will 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

**Assignments:**

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

**Course Outline of Record**

You may find the official course outline of record for this course at the following link:  
[https://portal.santarosa.edu/srweb/SR\\_CourseOutlines.aspx?ck=CS50.33](https://portal.santarosa.edu/srweb/SR_CourseOutlines.aspx?ck=CS50.33)

**Class Meetings**

**Spring 2024 Schedule**

Class Delivery	Day and Time	Modality
Online	Weeks start on Wednesdays	Canvas
Live weekly Web conference (required) <a href="https://santarosa-edu.zoom.us/j/208475953">https://santarosa-edu.zoom.us/j/208475953</a>	Wednesdays, 5:30pm - 7:30pm	Zoom

*All class materials for each module will be released online in Canvas on Wednesdays throughout the entire semester. A weekly live online meeting will be held on Wednesdays, 5:30pm - 7:30pm. Attendance at the live web conferences is required. Use this link to join: <https://santarosa-edu.zoom.us/j/208475953>. To view any weekly lecture's recorded screencast, visit the Screencast page for any week in the Modules section.*

*The first live Web conference will take place on Wednesday, January 17, 5:30pm - 7:30pm.*

*Students are expected to attend all sessions of the course and are required to notify instructor if missing a class meeting.*

## Instructor Contact

**Ethan Wilde**

Email: [ewilde@santarosa.edu](mailto:ewilde@santarosa.edu)

Phone: 707-527-4855

**Spring 2024 Office Hours**  
*January 22 – May 13, 2024*

Day	Time	Location
Mondays (online)	1:20pm - 8:00pm	Online: Skype <a href="https://www.skype.com/join/ethanwilde">ethanwilde</a> or Email <a href="mailto:ewilde@santarosa.edu">ewilde@santarosa.edu</a>

[» Reserve a future office hour appointment](#)

**I typically respond to emails within 48 hours, weekends excepted. I never respond on Sundays.**

## Course Web Site

Students will use the Canvas course web site for assignment instructions, submitting assignments, viewing classmates' work, sharing resources, and viewing grades. *The Google Chrome browser is recommended for viewing the Canvas-powered course site. Internet Explorer is not recommended.*

## Required Textbooks

***The Scrum Guide*** (1st)

Ken Schwaber and Jeff Sutherland

ISBN unknown

Free PDF eBook available

*No purchase necessary. Use the free eBook available for download below.*

[Download "The Scrum Guide" from this link.](#)

## *The Field Guide to Human-Centered Design* (1st)

IDEO.org

978-0991406319 (ISBN 13)

Free PDF eBook available

*No purchase necessary. Use the free eBook available for download below.*

[Download "The Field Guide to Human-Centered Design" from this link.](#)

## Equipment

- **A personal computer**, either at home, work or on the Santa Rosa or Petaluma campuses.

## Required Software + Services

- **Internet access**
- **Web browsers** including:
  - [Google Chrome](#) recommended and typically used in instructor demos
  - [Mozilla Firefox](#) recommended
- **Code editor** such as:
  - [Brackets](#) (Windows, Mac OS, free license)
  - [Microsoft Visual Studio Code](#) (Windows, Mac OS, free license)
  - [BBEdit](#) (Mac OS only)
  - [Sublime Text](#) (Windows, Mac OS, Linux)
- **File Transfer Protocol (FTP) software** such as:
  - [CyberDuck](#) (Mac OS and Windows, free license)
  - [Fetch](#) (Mac OS only)
  - [WinSCP](#) (Windows only)
- **Cloud hosting, version control + development environment services:**
  - [Repl.it](#) IDE (Integrated Development Environment) required for students working on non-CMS projects for hosting project development. Repl.it will provide a text editor and file transfer support without any additional software needed.
  - [Pantheon](#) required for all students working on CMS-driven web or mobile projects for hosting WordPress-based project development. *Instructions will be provided for setting up your free account later in the term.*
- **Graphics and prototyping software** such as:
  - Adobe Photoshop, part of a [Creative Cloud](#) subscription
  - [Gimp](#) open source application
  - [Pixlr](#) browser-based image editor
  - [Diagrams.net](#) browser-based drawing app
  - [Figma](#) user interface design tool app
- **PDF display software** such as:
  - [Adobe Reader](#)

## Optional Software

The additional software listed below is often used for Web development.

- **Additional Web browsers** including:
  - Apple Safari (Mac OS only)
  - Microsoft Edge (Windows 10 only)

## Important Dates

**Day Class Begins: Tuesday, January 16, 2024**

*(first course week begins with class meeting on January 17, 2024)*

Day Class Ends: Friday, May 24, 2024

Last Day to Drop with refund: Sunday, January 28, 2024

Last Day to Add with instructor's approval: Sunday, February 4, 2024

**Last Day to Drop without a 'W' symbol: Sunday, February 4, 2024**

**Last Day to Drop with a 'W' symbol: Sunday, April 21, 2024**

## Dropping the Class

If you decide to discontinue this course, it is your responsibility to officially drop it. A student may be dropped from any class when that student's absences exceed ten percent (10%) of the total hours of class time. It is strongly advised that if you need to miss more than one class/homework deadline in a row that you contact the instructor to avoid being dropped from the class.

## Attendance

For online courses, students who fail to complete the requirements of the first and second class modules will be dropped by the instructor.

## Pass-NoPass (P/NP)

You may not take this class P/NP.

## Instructor Announcements

The instructor will post announcements on the “Announcements” page in Canvas throughout the semester. Canvas notifies students according to their preferred Notification Preferences.

## Late Policy

Please make a plan before the course starts to allow yourself the necessary time each week to complete the required reading, watching, online discussion posting, and assignments. The official Course Outline of Record for this four-unit semester-length course stipulates that each student is expected to complete 210 hours of learning for the class. This works out to 12 hours per week for each of the seventeen weeks of regular instruction along with 6 hours for Finals Week. If you plan accordingly, you can avoid submitting assignments late.

All assignments are due at 11:59pm Pacific time on the **Tuesday** corresponding to the due date. A late submission will receive a 10% penalty for each week it is late. Submissions more than two weeks late are not accepted without prior written arrangement.

## Exams

There will be six exams over the course of the semester, including a midterm and final exam. The material comes from the textbook, class lectures and supplemental materials. If any exam is missed, a zero will be recorded as the score, unless you have made prior written arrangements with me. It is your responsibility to take the exams by the due date.

## Grading Policy

Click the “Grades” link in Canvas to keep track of your grades. I grade once a week and post grades and comments in the Canvas gradebook.

Grades will be assigned as follows:

Letter Grade	Percentage	Points Total
A	90% - 100%	900 points or more
B	80% - 89%	800 to 899 points
C	70% - 79%	700 to 799 points

<b>Letter Grade</b>	<b>Percentage</b>	<b>Points Total</b>
<b>D</b>	60% - 69%	600 to 699 points
<b>F</b>	59% or lower	599 points or less

If taking Pass/No Pass you need at least 70% of the total class points and to complete the midterm exam and the final exam to pass the class.

## Grading Breakdown

<b>Percent</b>	<b>Points</b>	<b>Grading Category</b>
<b>10.0%</b>	100 points	<b>Writing: Proposal + Documents</b>
<b>25.0%</b>	250 points	<b>Problem Solving: Design Development</b>
<b>50.0%</b>	500 points	<b>Skill Demonstrations: Final Project + Critiques</b>
<b>6%</b>	60 points	<b>4 Mini Quizzes (10-20 pts each)</b>
<b>4.5%</b>	45 points	<b>Midterm Exam</b>
<b>4.5%</b>	45 points	<b>Final Exam</b>
<b>100.0%</b>	1000 points	<b>1000 points possible</b>

## Standards of Conduct

Students who register in SRJC classes are required to abide by the SRJC Student Conduct Standards. Violation of the Standards is basis for referral to the Vice President of Student Services or dismissal from class or from the College. See the [Student Code of Conduct page](#).



Collaborating on or copying of tests or homework in whole or in part will be considered an act of academic dishonesty and result in a grade of 0 for that test or assignment, except for assignments that allow collaboration. Students are encouraged to share information and ideas, but not their work. See these links on Plagiarism:

- [SRJC's Statement on Academic Integrity](#)
- [SRJC Board Policy 8.2.8](#)

I expect each student to maintain high standards of civility and respect when communicating with each other. The following rules of netiquette should be observed in all class discussions and communications:

- Be kind and respectful to others
- Use full sentences
- Avoid jargon and acronyms
- Use language that supports others

## Special Needs

Every effort is made to conform to accessibility standards for all instructor-created materials. Students should contact their instructor as soon as possible if they find that they cannot access any course materials. Students with disabilities who believe they need accommodations in this class are encouraged to contact Disability Resources by calling (707) 527-4278 or visit online at [drd.santarosa.edu](http://drd.santarosa.edu).

## Student Health Services

Santa Rosa Junior College offers extensive health services to students. Visit Student Health Services online at [shs.santarosa.edu](http://shs.santarosa.edu) or call them at (707) 527-4445.

## Course Outline

Start Date	Canvas Module	Topics	Assignments
1/17	Week 1	Getting Started	<ul style="list-style-type: none"> <li>• Student Skills Survey</li> <li>• <i>Classmate Introductions</i> Discussion</li> <li>• <i>Summary of Your Work Style</i> Discussion</li> <li>• <i>Read + Summarize 2 of 5 Articles</i> Discussion</li> </ul>

Start Date	Canvas Module	Topics	Assignments
1/24	Week 2	Introduction to Agile Process with Scrum	<ul style="list-style-type: none"> <li>• <i>In-Class Client &amp; Project Summaries</i> Discussion (due in class)</li> <li>• Learning <i>Trello</i> Discussion</li> <li>• <i>Working with Virtual Teams</i> Discussion</li> <li>• Client &amp; Project Final Voting</li> </ul>
1/31	Week 3	Team Formation & Client Prep/Meeting	<ul style="list-style-type: none"> <li>• In-Class Initial Client Correspondence (due in class)</li> <li>• Preparing Your Team Trello Boards</li> <li>• <i>Developing a Team Communication Plan</i> Discussion</li> <li>• Initial Client Meeting</li> <li>• Weekly Project Journal</li> </ul>
2/7	Week 4	Meeting Debrief & Proposal Drafting	<ul style="list-style-type: none"> <li>• Initial Client Meeting Debrief</li> <li>• Draft Project Proposal</li> <li>• Weekly Project Journal</li> </ul>
2/14	Week 5	In-Class & Client Proposal Presentations	<ul style="list-style-type: none"> <li>• In-Class Draft Proposal Presentation (due in class)</li> <li>• Revised Proposal</li> <li>• Client Proposal Presentation</li> <li>• Weekly Project Journal</li> </ul>
2/21	Week 6	Client Feedback & Final Accepted Proposal	<ul style="list-style-type: none"> <li>• Final Accepted Proposal</li> <li>• Weekly Project Journal</li> </ul>
2/28	Week 7	Sprint 1: Initial Design & Research	<ul style="list-style-type: none"> <li>• Mini Quiz: Scrum Agile Process</li> <li>• Ideation Workshop Deliverables</li> <li>• Weekly Project Journal</li> </ul>

<b>Start Date</b>	<b>Canvas Module</b>	<b>Topics</b>	<b>Assignments</b>
3/6	Week 8	Sprint 2: In-Class & Client Design/Research Presentations	<ul style="list-style-type: none"> <li>• In-Class Design/Research Presentation (due in class)</li> <li>• Revised Design/Research Deliverables</li> <li>• Client Design/Research Presentation</li> <li>• Weekly Project Journal</li> </ul>
3/13	Week 9	Sprint 3: Client Feedback & Final Accepted Design	<ul style="list-style-type: none"> <li>• Final Accepted Design/Research Deliverables</li> <li>• Midterm Exam</li> <li>• Weekly Project Journal</li> </ul>
3/20	No Class	Spring Break	
3/27	Week 10	Sprint 4: Alpha Development	<ul style="list-style-type: none"> <li>• Alpha Build</li> <li>• Weekly Project Journal</li> </ul>
4/3	Week 11	Sprint 5: Beta Development	<ul style="list-style-type: none"> <li>• Beta Build</li> <li>• Draft User Testing Script</li> <li>• Weekly Project Journal</li> </ul>
4/10	Week 12	Sprint 6: In-Class User Testing & Client Beta Presentations	<ul style="list-style-type: none"> <li>• In-Class Initial User Testing (due in class)</li> <li>• Client Beta Presentation</li> <li>• Weekly Project Journal</li> </ul>
4/17	Week 13	Sprint 7: Client Beta Feedback & Final Dev Sprint 1	<ul style="list-style-type: none"> <li>• Dev Sprint 1 Build</li> <li>• Mini Quiz: Development Process</li> <li>• Weekly Project Journal</li> </ul>

Start Date	Canvas Module	Topics	Assignments
4/24	Week 14	Sprint 8: Final Dev Sprint 2 & User Testing	<ul style="list-style-type: none"> <li>• Dev Sprint 2 Build</li> <li>• Final User Testing (due in class)</li> <li>• Draft Presentation</li> <li>• Weekly Project Journal</li> </ul>
5/1	Week 15	Sprint 9: Final Dev Sprint 3 & QA Testing	<ul style="list-style-type: none"> <li>• In-Class Presentation Rehearsals (ungraded)</li> <li>• Dev Sprint 3 Build</li> <li>• Final Presentation Materials</li> <li>• Weekly Project Journal</li> </ul>
5/8	Week 16	Client Final Review & Feedback / Project Documentation	<ul style="list-style-type: none"> <li>• Client Final Review</li> <li>• Weekly Project Journal</li> </ul>
5/15	Week 17	In-Class Final Presentation / Project plus Documentation Delivery & Launch	<ul style="list-style-type: none"> <li>• In-Class Final Presentation Event</li> <li>• Mini Quiz: Self Evaluation</li> <li>• Mini Quiz: Teammate Evaluation</li> <li>• Final Build + Documentation Deliverables</li> <li>• Billable Hours Survey</li> <li>• Weekly Project Journal</li> </ul>
5/20 Mon - 5/24 Fri	Week 18	Final Presentation Event	<ul style="list-style-type: none"> <li>• Online Event 5/22 6-8pm (clients invited)</li> <li>• Final Exam (Self-Evaluation)</li> </ul>

**Note to students:** the assignments listed above will become available as modules are released in sequence each week. To view course content, go to **Modules**.

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