



Oregon State University
Ecampus

Course Name: Senior Software Engineering Project I

Course Number: CS 461

Credits: 3

Instructor name: Bill Pfeil

Instructor email: pfeilw@oregonstate.edu

Teaching Assistant: Rashmi Jadhav

TA email: jadhavr@oregonstate.edu

Course Description

Utilize software engineering methodology in a team environment to develop a real-world application. Teams will be responsible for all phases of software development, including project planning, requirements analysis, design, coding, testing, configuration management, quality assurance, documentation, and delivery. (Writing Intensive Course)

Prerequisites or Corequisites

CS 361, 325 and 362.

A minimum grade of C is required in CS 361, CS 325 and CS 362.

Communication

If I need to contact you, I will email you directly (or via the class mailing list).

Here is the preferred way to contact me:

Email me directly at pfeilw@oregonstate.edu. (If I don't respond in 24 hours please email me again).

Messaging me on Canvas is an unreliable and indirect way to send me an email that I am less likely to notice in the sea of Canvas notification and daily digest spam from several courses I am subscribed to.

Slack is great but we are changing over to Teams. Use email.

We are not Debuggers, Programmers, or Architects — that's your job! Do not send the instructor or TAs any code except what is required for your assignment submissions. Don't expect the instructor or the TAs to see comments left with assignment submissions. Canvas allows us to download the entire class's submissions as one .zip file, which does not include these comments. If you need to make a meta-comment about your submission, add it to the submission or email the person grading that submission directly.

Time Expectations

This course is online only. This course combines approximately 100 hours of online activities and assignments for 3 credits.

Technical Assistance

If you experience any errors or problems while in your online course, contact 24-7 Canvas Support through the Help link within Canvas. If you experience computer difficulties, need help downloading a browser or plug-in, or need assistance logging into a course, contact the IS Service Desk for assistance. You can call (541) 737-8787 or visit the [IS Service Desk](#) online.

Learning Resources

All class materials can be found on the course web-page. There is no textbook; students are expected to source their own learning resources to accomplish the goals of their projects. A microphone and screen-recording device may be required, for submitting project or prototype demonstrations.

Note: Check with the OSU Beaver Store for up-to-date information for the term you enroll ([OSU Beaver Store website](#) or 800-595-0357). If you purchase course materials from other sources, be very careful to obtain the correct ISBN.

Measurable Student Learning Outcomes

After completion of this course, students will have demonstrated an ability to:

1. Apply all aspects of the software engineering process, including project planning, requirements documents, software design, coding, testing, walk-throughs, documentation, and delivery.
2. Demonstrate good communication skills in the form of weekly reports and project talks, posters, and elevator talks.
3. Participate effectively in a team environment.
4. Analyze and organize their own career preparation.
5. Evaluate the professional, legal, and/or social implications of software product development.

Additional Student Learning Outcomes - At the completion of the course, students will be able to:

1. Design, plan, organize, synthesize and complete a significant software project in three academic quarters.
2. Evaluate the contributions and importance of software projects to the broad user community.
3. Explain the importance of software projects to people from other disciplines and the general public.
4. For WIC: Develop and articulate content knowledge and critical thinking in the discipline through frequent practice of informal and formal writing.
5. For WIC: Demonstrate knowledge/understanding of audience expectations, genres, and conventions appropriate to communicating in the discipline.
6. For WIC: Demonstrate the ability to compose a document of at least 2000 words through multiple aspects of writing, including brainstorming, drafting, using sources appropriately, and revising comprehensively after

7. receiving feedback on a draft.

Evaluation of Student Performance

- Blog Posts - 90 points total
- Discussions- 120 points total
- Individual Writing Assignments - 205 points total
- Team Writing Collaborations - 550 points total
- Other (including project prototype) - 160 points
- Total - 1125 points

Letter Grade

Grading responsibilities are shared between the instructors and the TAs. The Course Introduction tab details who grades which assignment, and which groups each person will grade.

Your group will not create your grade for you. You need to accomplish the goals you sign off on by submitting all assignments. In this course, failure to communicate with your team, or to provide reasonably working code compatible with the project per the specification may result in you receiving a non-passing grade while the rest of your group passes. You may be removed from your team if you are found to not be putting in the required amount of work.

100	┐
	└─ A
92.95	┐
	└─ A
89.95	┐
	└─ B+
86.95	┐
	└─ B
82.95	┐
	└─ B
79.95	┐
	└─ C+
76.95	┐
	└─ C
72.95	┐
	└─ C

69.95 └

└ D+

66.95 └

└ D

62.95 └

└ D

59.95 └

└ F

0 └

Course Content

Week	Topic	Explorations	Learning Activities
1	Introduction	What is a Projects Course? Blogging Your Project	Choose Your Project Initial Blog Post
2	Teamwork	How to Write a Problem Statement Working in Teams	Discussion: Project Management Tools Individual Problem Statement Create Your Team Working Rules
3	Project Requirements	Traditional Requirements Agile Development Agile Requirements	Discussion: Technology Discovery Team Problem Statement Individual Requirements
4	Technology Review	Writing a Technical Requirements Document Choosing Your Technologies	Discussion: Technology Review Team Requirements Final Individual Technology Review
5	Software Design	Separation of Concerns UI/UX Design	Individual Technology Review Begin: Team Design Document
6	Design and Prototyping	Prototyping Effective Design	Discussion: Favorite Design Pattern Begin: Team Prototype Continue: Team Design Document
7	Design Review	Design Review The Role of Criticism in Design	Collaboration: Team Design Review

Week	Topic	Explorations	Learning Activities
			Due: Team Design Document (draft)
8	Game Changers	Game Changers Soft Skills	Discussion: Game Changers Begin: Team Design Document (final)
9	Resume Guide	Your Resume Your Online Presence	Begin: Fall Term Progress Report Discussion: Peer Feedback for Resume Due: Team Prototype
10	Job Search	Hack Your Job Search Hack Your Interview	Fall Term Progress Report Team Design Document Final Client Verification
Finals	No Final in this Course		

Course Policies

Discussion Participation

Students are expected to participate in all graded discussions. While there is great flexibility in online courses, this is not a self-paced course. You will need to participate in discussions on at least two different days each week, with your first post due no later than Wednesday evening, and your second and third posts due by the end of each week.

Late Work Policy

Most assignments allow submissions up to two days after the due date for a reduced maximum score. Each assignment has a due date listed on Canvas. Assignments that may be submitted late also have an available until date, which is 48 hours after the initial due date. For these assignments, the following policy applies:

- Assignments submitted on the day after the due date will be graded normally and then any points past a 90% point total will be lost.
- Assignments submitted on the second day after the due date will be graded normally and then any points past a 75% point total will be lost.

Note that, unlike in other courses, late assignment grades will not be scaled by some factor; any points above a threshold (90% or 75%) will simply be discarded.

Incompletes

Incomplete (I) grades will be granted only in emergency cases (usually only for a death in the family, major illness or injury, or birth of your child), and if the student has turned in 80% of the points possible (in other words, usually everything but the final paper). If you are having any difficulty that might prevent you completing the coursework, please don't wait until the end of the term; let me know right away.

Statement Regarding Religious Accommodation

This course is offered through Oregon State University Ecampus. For more information visit: <http://ecampus.oregonstate.edu>.

Oregon State University is required to provide reasonable accommodations for employee and student sincerely held religious beliefs. It is incumbent on the student making the request to make the faculty member aware of the request as soon as possible prior to the need for the accommodation. See the [Religious Accommodation Process for Students](#).

Guidelines for a Productive and Effective Online Classroom

(Adapted from Dr. Susan Shaw, Oregon State University)

Students are expected to conduct themselves in the course (e.g., on discussion boards, email) in compliance with the university's regulations regarding civility. Civility is an essential ingredient for academic discourse. All communications for this course should be conducted constructively, civilly, and respectfully. Differences in beliefs, opinions, and approaches are to be expected. In all you say and do for this course, be professional. Please bring any communications you believe to be in violation of this class policy to the attention of your instructor.

Active interaction with peers and your instructor is essential to success in this online course, paying particular attention to the following:

- Unless indicated otherwise, please complete the readings and view other instructional materials for each week before participating in the discussion board.
- Read your posts carefully before submitting them.
- Be respectful of others and their opinions, valuing diversity in backgrounds, abilities, and experiences.
- Challenging the ideas held by others is an integral aspect of critical thinking and the academic process. Please word your responses carefully, and recognize that others are expected to challenge your ideas. A positive atmosphere of healthy debate is encouraged.

Expectations for Student Conduct

Student conduct is governed by the university's policies, as explained in the Student Conduct Code (<https://beav.es/codeofconduct>). Students are expected to conduct themselves in the course (e.g., on discussion boards, email postings) in compliance with the university's regulations regarding civility.

Academic Integrity

Integrity is a character-driven commitment to honesty, doing what is right, and guiding others to do what is right. Oregon State University Ecampus students and faculty have a responsibility to act with integrity in all of our educational work, and that integrity enables this community of learners to interact in the spirit of trust, honesty, and fairness across the globe.

Academic misconduct, or violations of academic integrity, can fall into seven broad areas, including but not limited to: cheating; plagiarism; falsification; assisting; tampering; multiple submissions of work; and unauthorized recording and use.

It is important that you understand what student actions are defined as academic misconduct at Oregon State University. The OSU Libraries offer a [tutorial on academic misconduct](#), and you can also refer to the [OSU Student Code of Conduct](#) and [the Office of Student Conduct and Community Standard's website](#) for more information. More importantly, if you are unsure if something will violate our academic integrity policy, ask your professors, GTAs, academic advisors, or academic integrity officers.

TurnItIn

Your instructor may ask you to submit one or more of your writings to Turnitin, a plagiarism prevention service. Your assignment content will be checked for potential plagiarism against Internet sources, academic journal articles, and the papers of other OSU students, for common or borrowed content. Turnitin generates a report that highlights any potentially unoriginal text in your paper. The report may be submitted directly to your instructor or your instructor may elect to have you submit initial drafts through Turnitin, and you will receive the report allowing you the opportunity to make adjustments and ensure that all source material has been properly cited. Papers you submit through Turnitin for this or any class will be added to the OSU Turnitin database and may be checked against other OSU paper submissions. You will retain all rights to your written work. For further information, visit [Academic Integrity for Students: Turnitin – What is it?](#)

Statement Regarding Students with Disabilities

Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval, please contact DAS immediately at 541-737-4098 or at <http://ds.oregonstate.edu>. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.

Accessibility of Course Materials

All materials used in this course are accessible. If you require accommodations please contact [Disability Access Services \(DAS\)](#).

Additionally, Canvas, the learning management system through which this course is offered, provides a [vendor statement](#) certifying how the platform is accessible to students with disabilities.

Tutoring and Writing Assistance

TutorMe is a leading provider of online tutoring and learner support services fully staffed by experienced, trained and monitored tutors. Access TutorMe from within your Canvas course menu.

The Oregon State [Online Writing Suite](#) is also available for students enrolled in Ecampus courses.

Ecampus Reach Out for Success

University students encounter setbacks from time to time. If you encounter difficulties and need assistance, it's important to reach out. Consider discussing the situation with an instructor or academic advisor. Learn about [resources that assist with wellness and academic success](#).

Ecampus students are always encouraged to discuss issues that impact your academic success with the [Ecampus Success Team](#). Email ecampus.success@oregonstate.edu to identify strategies and resources that can support you in your educational goals.

If you feel comfortable sharing how a hardship may impact your performance in this course, please reach out to me as your instructor.

- **For mental health:**

Learn about [counseling and psychological resources for Ecampus students](#). If you are in immediate crisis, please contact the Crisis Text Line by texting OREGON to 741-741 or call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255).

- **For financial hardship:**

Any student whose academic performance is impacted due to financial stress or the inability to afford groceries, housing, and other necessities for any reason is urged to contact the Director of Care for support (541-737-8748).

Student Evaluation of Courses

During Fall, Winter, and Spring term, the online Student Evaluation of Teaching system opens to students the Wednesday of week 8 and closes the Sunday before Finals Week. Students will receive notification, instructions and the link through their ONID email. They may also log into the system via Online Services. Course evaluation results are extremely important and used to help improve courses and the learning experience of future students. Responses are anonymous (unless a student chooses to "sign" their comments, agreeing to relinquish anonymity) and unavailable to instructors until after grades have been posted. The results of scaled questions and signed comments go to both the instructor and their unit head/supervisor. Anonymous (unsigned) comments go to the instructor only.