Course Syllabus

Please note that some content linked on this page may only be available to registered students.

Course Name: Senior Software Engineering Project II (online)
Course Number: CS 462
Credits: 3
Instructor Name: Bill Pfeil
Instructor Email: pfeilw@oregonstate.edu (mailto:pfeilw@oregonstate.edu)
Teaching Assistant name and contact info:

- Rashmi Jadhav - jadhavr@oregonstate.edu (mailto:jadhavr@oregonstate.edu)

This syllabus describes the administrative parts of the course and serves as a contract between student and instructor. Remaining in this course indicates acceptance of these rules.

Remember that in this Capstone course, you are expected to behave professionally. Please use this document throughout the course.

Table of Contents

Course Description

Real-world team-based experience with the software engineering design and delivery cycle, including requirements analysis and specification, design techniques, and requirements and final project written documentation. For students in the online CS double-degree program only.

Prerequisites: CS 362 and CS 461.
A minimum grade of C is required in CS 362 and CS 461.

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 (mailto: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 TA(s) any code except what is required for your assignment submissions.

Don't expect the instructor or the TA(s) 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 (https://oregonstate.teamdynamix.com/TDClient/Requests/TicketRequests/NewForm?ID=Dr9c0T7BaSI_)** 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 (https://osubeaverstore.com/Academics)** 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 sequence, 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 sequence, 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 receiving feedback on a draft.
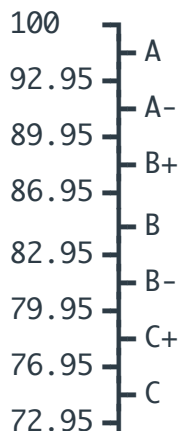
Evaluation of Student Performance

- Blog Posts - 80 points total
- Project Management Assignments - 420 points total
- Reports and Documentation - 300 points
- Project Demonstration Videos - 200 points
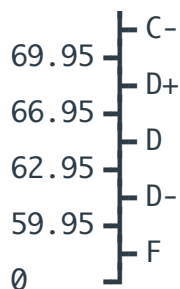- Total - 1000 points

Letter Grade

Grading responsibilities are shared between the instructors and the TAs.

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.

```
Total Percentage vs. Letter Grade

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 ─┤
         │
    0 ─┴─ F
```

Course Content

CS 462 Course Schedule

Week	Topic	Explorations	Learning Activities
1	Introduction	Course Introduction Agile Scrum	Assignment - Setup Sprint Tasks Collaboration - Sprint Planning Meeting
2	Clean Code	Clean Code	Discussion - Standup meeting Initial Blog Post
3	Agile Development	Agile Development	Collaboration - Sprint Planning Meeting Discussion - Standup meeting Blog Post
4	Code Reviews	Code Reviews	Discussion - Code Review #1 Discussion - Standup meeting Blog Post
5	JIT Design	JIT Design	Collaboration - Sprint Planning Meeting Discussion - Standup meeting Blog Post
6	Company Culture	Company Culture	Discussion - Standup Meeting Assignment - v0.0.1 "Alpha" Collaboration - Update Design Document Weekly Blog Post
7	Programming Projects	Programming Projects	Collaboration - Sprint Planning Meeting Discussion - Standup Meeting Blog Post
8	Your Online Presence	Your Online Presence	Discussion - Code Review #2 Discussion - Standup meeting Blog Post
9	Soft Skills	Soft Skills	Discussion - Standup Meeting Blog Post
10	Job Search	Hack Your Job Search	Discussion - Standup Meeting Assignment - v0.0.2 "Beta" Collaboration - Update Design Document Collaboration - Final Progress Report
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 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.

Makeup Exams

This course has no tests or exams.

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

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** **(http://eoa.oregonstate.edu/religious-accommodation-policy)** .

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 (**OSU Student Code of Conduct** **(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 (https://guides.library.oregonstate.edu/c.php?g=286121&p=3896378)** , and you can also refer to the **OSU Student Code of Conduct** **(https://beav.es/codeofconduct)** and **the Office of Student Conduct and Community Standard's website** **(https://studentlife.oregonstate.edu/studentconduct/student-info)** 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? (http://guides.library.oregonstate.edu/c.php?g=286121&p=1906660)**

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 **Disability Access Services   (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)   (http://ds.oregonstate.edu/home/)**.

Additionally, Canvas, the learning management system through which this course is offered, provides a **vendor statement   (http://www.instructure.com/accessibility)** 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   (http://writingcenter.oregonstate.edu/online-writing-lab)** is also

The Oregon State **Online Writing Suite** **(http://writingcenter.oregonstate.edu/online-writing-lab)** 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** **(https://counseling.oregonstate.edu/reach-out-success)** .

Ecampus students are always encouraged to discuss issues that impact your academic success with the **Ecampus Success Team** **(https://ecampus.oregonstate.edu/services/student-services/)** . Email **ecampus.success@oregonstate.edu (mailto: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 (https://counseling.oregonstate.edu/main/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.

Course Summary:

Date	Details	
Wed Jan 6, 2021	📝 **Syllabus Quiz** (https://canvas.oregonstate.edu/courses/1817807/assignments/8156623)	due by 11:59pm
	📝 **Setting up Collaborations** (https://canvas.oregonstate.edu/courses/1817807/assignments/8150921)	due by 11:59pm
Fri Jan 8, 2021	📝 **Discussion: Introduce Yourself to your Teammates** (https://canvas.oregonstate.edu/courses/1817807/assignments/8144615)	due by 11:59pm
Sun Jan 10, 2021	📝 **Collaboration - Sprint Planning Meeting #1** (https://canvas.oregonstate.edu/courses/1817807/assignments/8144629)	due by 11:59pm
	📝 **Setup your Team Task Board** (https://canvas.oregonstate.edu/courses/1817807/assignments/8144635)	due by 11:59pm
Fri Jan 15, 2021	📝 **Standup Meeting #1** (https://canvas.oregonstate.edu/courses/1817807/assignments/8144627)	due by 11:59pm
Sun Jan 17, 2021	📝 **Initial blog post** (https://canvas.oregonstate.edu/courses/1817807/assignments/8144631)	due by 11:59pm
Fri Jan 22, 2021	📝 **Standup Meeting #2** (https://canvas.oregonstate.edu/courses/1817807/assignments/8144617)	due by 11:59pm
Sun Jan 24, 2021	📝 **Blog Post #2** (https://canvas.oregonstate.edu/courses/1817807/assignments/8144632)	due by 11:59pm
	📝 **Collaboration - Sprint Planning Meeting #2** (https://canvas.oregonstate.edu/courses/1817807/assignments/8144630)	due by 11:59pm
Fri Jan 29, 2021	📝 **Standup Meeting #3** (https://canvas.oregonstate.edu/courses/1817807/assignments/8144616)	due by 11:59pm
Sun Jan 31, 2021	📝 **Blog Post #3** (https://canvas.oregonstate.edu/courses/1817807/assignments/8144633)	due by 11:59pm

Date	Details	
	📝 **Discussion - Code Review #1** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8144624)**	due by 11:59pm
Fri Feb 5, 2021	📝 **Standup Meeting #4** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8146267)**	due by 11:59pm
Sun Feb 7, 2021	📝 **Blog Post #4** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8146284)**	due by 11:59pm
	📝 **Collaboration - Sprint Planning Meeting #3** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8146283)**	due by 11:59pm
Fri Feb 12, 2021	📝 **Standup Meeting #5** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8158005)**	due by 11:59pm
	📝 **Assignment - v0.0.1 "Alpha"** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8158006)**	due by 11:59pm
Sun Feb 14, 2021	📝 **Blog Post #5** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8149197)**	due by 11:59pm
	📝 **Collaboration: Update Team Design Document Alpha** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8149936)**	due by 11:59pm
Fri Feb 19, 2021	📝 **Standup Meeting #6** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8158385)**	due by 11:59pm
Sun Feb 21, 2021	📝 **Blog Post #6** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8149198)**	due by 11:59pm
	📝 **Collaboration - Sprint Planning Meeting #4** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8158396)**	due by 11:59pm
Fri Feb 26, 2021	📝 **Standup Meeting #7** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8158870)**	due by 11:59pm
Sun Feb 28, 2021	📝 **Blog Post #7** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8149199)**	due by 11:59pm

Date	Details	
	📝 **Discussion - Code Review #2** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8158805)**	due by 11:59pm
Fri Mar 5, 2021	📝 **Standup Meeting #8** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8159085)**	due by 11:59pm
Sun Mar 7, 2021	📝 **Blog Post #8** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8149200)**	due by 11:59pm
Mon Mar 8, 2021	📝 **Collaboration - Final Progress Report** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8159166)**	due by 11:59pm
Wed Mar 10, 2021	📝 **Assignment - v0.0.2 "Beta"** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8159156)**	due by 11:59pm
	📝 **Collaboration: Update Team Design Document Beta** **(https://canvas.oregonstate.edu/courses/1817807/assignments/8159160)**	due by 11:59pm