OTTERBEIN UNIVERSITY

Syllabus

COMP 4100-01
Computer Science Practicum

Spring Semester 2025

Basic Information

Credits:	3.0
Time:	**MWF** 1:50 - 2:45 p.m.
Location:	Point 113
Prerequisites:	COMP 3100

Instructor Information

Name:	Dr. Barry Wittman
E-mail:	wittman1@otterbein.edu
Office:	Art & Communication C123
Phone:	(614) 823-2944
Office hours:	**MWF** 10:15 – 11:15 a.m., **MW** 3:00 – 4:00 p.m., **F** 3:00 – 5:00 p.m., **T** 10:00 – 11:15 a.m., **TR** 2:00 – 4:00 p.m., and by appointment

Text Book

None. You may use textbooks from previous courses for reference. Other reference material will be provided as needed.

Course Catalog Description

Application of the computer science curriculum's topics through hands-on experience. Focuses on group problem-solving skills. Teams complete significant semester-length software projects.

Student Learning Outcomes

By the end of the course, students will be able to:

I. Develop a usable software product using agile methodologies
II. Perform major development activities such as requirements gathering, architecture design, implementation, and testing
III. Use a version control system to manage a software repository
IV. Use a tracking system to track tasks and bugs
V. Interact with clients
VI. Present a technical project to a broad audience including clients
VII. Work effectively as a team

Program Learning Outcomes

The Computer Science major has a set of 10 Student Learning Outcomes (SLOs). Work in this course contributes to the following SLOs:

4. Students are proficient in a software development paradigm.
6. Students can independently learn and apply new methods and tools.
7. Students can effectively present a curricular topic to an audience.
8. Students can produce written documents describing project specifications and design.
9. Students can effectively collaborate on team projects.

Method for Determining Course Grade

The final grade for this course will depend upon the grades and scores earned on course components weighted as follows:

75%	Agile Software Development Project	
	Initial Product Backlog (5%):	01/24/2025
	Sprint 1 (10%):	02/07/2025
	Sprint 2 (10%):	02/21/2025
	Sprint 3 (10%):	03/07/2025
	Sprint 4 (10%):	03/28/2025

	Sprint 5 (10%):	04/11/2025
	Sprint 6 (10%):	04/25/2025
	Final Presentation (10%):	04/28/2025
10%	Sprint reflections	
15%	Attendance	

Grades will be computed by rounding numerical percentages to the nearest integer and applying the following table:

A	93-100	**B-**	80-82	**D+**	67-69
A-	90-92	**C+**	77-79	**D**	60-66
B+	87-89	**C**	73-76	**F**	0-59
B	83-86	**C-**	70-72		

Grades for each project and assignment will be recorded in Brightspace. Students may compute their current average by using these scores with the weights listed above.

Attendance and Participation Policy

Attendance is expected of every student at every class meeting. Class meetings will be used to work on team projects; thus, unexcused absences hurt the team and will be penalized.

Students are expected to attend in-person class sessions as indicated on the schedule. However, if a student is not feeling well, that student should not come to the in-person class session that day. To catch up on work, students should visit the instructor during office hours or another scheduled meeting time.

Students are expected to maintain an attitude of respect at all times toward their colleagues, the equipment, and the instructor. Students are expected to refrain from using technology for non-course-related purposes during class time and will be penalized 1% of the final grade for each occurrence. Students who use offensive language or are otherwise disruptive of the classroom will be asked to leave.

Expectations for Out-of-Class Work

Semester Project

All projects in this course are sprints in a semester-long effort to create a usable piece of software for a client. These sprints will be done in teams of four or five. Students are permitted to select their own teams, which will be fixed for the entire semester. Students should select their teams through Brightspace.

Teams are responsible for dividing their workload. Each member of the team will receive a grade for each project based on the overall grade, weighted by that member's participation. The files for each submission should be part of a tagged release on a private repository on GitHub created before the due date . If the project is late, the group will receive a score of 0.

Sprints will be graded based on the following criteria:

1. **User stories selected:** Selecting high-priority user stories
2. **User stories completed:** Completing user stories selected for this sprint
3. **Quality of implementation:** Writing effective and efficient code with good style and formatting
4. **Testing:** Providing appropriate tests for completed user stories
5. **Client satisfaction:** Meeting the client's expectations
6. **Review:** Review with client is done to assess state of the product and decide the direction for the next sprint
7. **Retrospective:** Team retrospective is done to assess what went well on this sprint and what could be done better in the future

Initial Product Backlog

Based on consultation with the client, the team will select an initial product backlog before the first sprint. This backlog will contain user stories covering all major features of the final product and a rating of how much effort each one is. This document will also contain a product vision statement.

Sprint Reflections

Each student will be required to fill out a short form reflecting on the sprint and the participation of group members during the sprint. Each reflection must be uploaded into Brightspace before 11:59 p.m. on the due date. Reflections submitted after the deadline will not be accepted. Because the form is already in Word format, reflections must be turned in as a Word document.

Academic Honesty

Academic dishonesty includes cheating, complicity, falsification, multiple submission, and plagiarism. To understand better what each of these kinds of dishonesty entails, see the full statement on Academic Dishonesty in the *Campus Life Handbook*, beginning at the bottom of page 47.

All cases of suspected Academic Dishonesty will be forwarded to Academic Affairs. To learn more about the process, see the above cited section of the *Campus Life Handbook*. Academic Dishonesty may result in automatic failure of the assignment or the course itself, or even suspension or expulsion proceedings.

You are plagiarizing when you:

1. Copy material from a source without using quotation marks and proper citation.
2. Follow the movement of the source, substituting words and sentences but keeping its meaning, without citing it.
3. Lift phrases or terms from a source and embed them in your own prose without using quotation marks and proper citation.
4. Borrow ideas (that are not common knowledge) from a source without proper citation.
5. Turn in a paper wholly or partially written by someone else.

If you are uncertain about when and how to cite sources, or what is allowable in completing assignment and exams, please speak with your professor.

All projects must be completed by the students in a given team, without assistance from anyone other than the instructor. Students can discuss the course material with each other, but all work must be done within teams. For all activities in the course, students are expected to act according to the official policy on academic dishonesty and the highest standards of personal integrity.

For the first infraction of academic honesty in this course, the instructor will seek a penalty of a 0 for the project or assignment in question and a reduction of a full letter grade in the final grade. If a second infraction occurs, the instructor will seek the maximum penalty possible under the University's regulations.

Generative AI

Artificial Intelligence (AI) is any computer system designed to perform a cognitive or behavioral task historically believed to be one only humans can perform. Generative AI is a term used for recent AI systems that generate significant quantities of content such as text, images, audio, or video from a short input prompt, usually text.

Because this course aims to provide a hands-on experience similar to working in industry, generative AI can be used for assistance with code. However, it is forbidden for any written assignments, including retrospectives, reflections, and reviews. Students have the responsibility to review all AI output for inaccuracies and bias, both of which are persistent problems with current tools. Students must provide attribution for any submitted content from a generative AI tool, including the name of the tool and date of access. Failure to do so shall be considered an act of academic dishonesty.

Statement on Credit Hour Definition/Expectation for Student Work

For each credit hour of classroom or direct faculty instruction, students are expected to engage in two hours of out-of-class course-related work (readings, homework, studying, project preparation, etc.). A three-credit hour course requires six hours per week of out-of-class work. These expectations are the same for blended and online courses, with some or all of the direct faculty instruction occurring online instead of in a classroom.

Nondiscrimination at Otterbein

Otterbein University is committed to providing a welcoming environment free from unlawful discrimination. To this end, the University prohibits any form of discrimination against any person on the basis of race, color, sex, gender, pregnancy, religion, creed, marital status, partnership status, age, sexual orientation, gender identity, gender expression, national origin, disability, military status, or any other legally protected status in its programs and activities. All Otterbein faculty and staff share in the responsibility to create a safe learning environment for all students and for the campus as a whole. Students who believe they have been discriminated against should contact the Office of Human Resources, (614) 823-1805 / hr@otterbein.edu.

Any person may report sexual harassment, sexual violence, dating violence, and stalking by contacting Julie Saker, Deputy Title IX Coordinator at (614) 823-1154 / jsaker@otterbein.edu.

If a student would prefer to share information about sexual harassment, sexual violence or discrimination to a *confidential* employee who does not have a reporting responsibility, they can contact the Counseling Center, (614) 823-1333 / counseling@otterbein.edu, or the WGSRC Peer Advocates, wgsrc@otterbein.edu.

Information about these policies can be found here.

Disability Services

The University has a continuing commitment to providing access and reasonable accommodations for students with disabilities, including mental health diagnoses and chronic or temporary medical conditions. Students who may need accommodations or would like referrals to explore a potential diagnosis are urged to contact Disability Services (DS) as soon as possible. DS will facilitate accommodations and assist the instructor in minimizing barriers to provide an accessible educational experience. Please contact DS at DisabilityServices@otterbein.edu. More info can also be found here. Your instructor is happy to discuss accommodations privately with you as well.

Counseling Services

Given the level of uncertainty in the world, many students might experience feelings of threat, fear, and uneasiness. For extra support – in the way of just being able to verbalize your feelings to an interested outsider, gaining some reassurance and validation of your feelings, making plans to move forward optimistically and safely – reach out to any staff. Otterbein staff want to provide not only respect but also verbal and emotional support and encouragement. The Counseling Center can be reached at (614) 823-1333. You can also call or text 988, the Suicide and Crisis Lifeline of Ohio, for 24/7 access to a mental health professional.

Academic Support Center

The Academic Support Center (ASC) helps students develop and strengthen the skills necessary to attain their academic goals. They support student learning and success through: tutoring, teaching, disability services, and academic coaching. All services are free for Otterbein students. Their purpose is to help students be academically successful. Please contact them to request a tutor or learn more about the ASC by calling (614) 823-1610 or visiting the ASC website.

Library Services

The Courtright Memorial Library provides a broad range of services and resources, from color printing and a game collection to 24/7 access to more than 220 scholarly databases and e-books here. On-campus students can access in-person help, quiet study spaces, and open computer labs during the library's open hours.

Students can also access the many e-textbooks on reserve by clicking the Course Reserves tab on the library web page or find help for a specific subject area by searching LibGuides.

Need more help? Students can chat with a librarian by clicking the Ask Me tab on the right side of the library homepage. Students also may e-mail the library at library@otterbein.edu. For in-depth research help, make an appointment for a virtual research consultation with your personal librarian.

Tentative Schedule

The following is a tentative schedule of the topics to be covered in each week. This schedule is subject to change as need dictates. Students will be informed of changes by the instructor in class. A schedule will be kept on the course webpage.

Week	Starting	Topics	Notes
1	01/13/25	Team Selection	
2	01/20/25	Preparation	MLK, Initial Product Backlog Due
3	01/27/25	Sprint 1	
4	02/03/25	Sprint 1	
5	02/10/25	Sprint 2	
6	02/17/25	Sprint 2	
7	02/24/25	Sprint 3	
8	03/03/25	Sprint 3	
	03/10/25		Spring Break
9	03/17/25	Sprint 4	
10	03/24/25	Sprint 4	
11	03/31/25	Sprint 5	
12	04/07/25	Sprint 5	
13	04/14/25	Sprint 6	Good Friday
14	04/21/25	Sprint 6	
15	04/28/25	Exam Week	Presentation During Final Exam