

University of Oklahoma
College of Engineering
Computer Science 3203
Software Engineering
Fall 2022 Syllabus

General Information

Class Time: Monday and Wednesday 4:30 pm - 5:45 pm
Class Location: Sarkeys Energy Center 235
Prerequisites: C S 2413, and C S 2813 or MATH 2513
and Computer Science major or minor

Instructor and Office Hours:

Name	Office	Hours	Email
Ji Hwan Park	Zoom	Monday 10:00 am - 11:30 am	jpark@ou.edu
	Zoom	Wednesday 10:00 am - 11:30 am	

Teaching Assistant and Office Hours:

Name	Office	Hours	Email
Oluwasijibomi Ajisegiri	Zoom	Tuesday 12:00 pm - 1:30 pm	oluwasijibomi.ajisegiri@ou.edu
	Zoom	Thursday 11:00 am - 12:30 pm	
Venkat Narra			vnarra558@ou.edu

Important Dates

First Day of Class	August 22, 2022
Final Exam	Sarkeys Energy Center 235, Dec 13, 2022, 10:30 am - 12:30 pm

Text and Course Materials

Required Materials:

1. *Engineering Software Products: An Introduction to Modern Software Engineering*, Ian Sommerville, 1st edition, Pearson Education, 2019

Supplemental Materials (not an exhaustive list):

1. *Git*, <https://www.atlassian.com/git/tutorials/atlassian-git-cheatsheet>
2. *Docker*, <https://docs.docker.com/get-started/>
3. *Express*, <https://expressjs.com/en/starter/generator.html>

2.1 Ownership of Course Materials

The instructor retains ownership and all rights to the original content. This includes but is not limited to exams, lectures, quizzes, handouts, protocols, electronic documents, syllabi, and all other materials. Original or transcribed course content may not be copied, recorded, retransmitted, posted on-line, or sold without the expressed written consent of the instructor. Violation of content ownership will be treated as academic misconduct.

Course Description

This course introduces the theory and practice of software engineering, with a focus on planning and design processes. Topics include methods and tools for software specification, design, and documentation. You will be introduced to architectural modularity, encapsulation of software objects, and software development processes such as design review, code inspection, and defect tracking. You will apply these ideas to design and document software products, and study of professional ethics, responsibility, legal issues. You will also learn about cloud computing concepts, core services, security, architecture and pricing.

3.1 ABET Student Outcomes

The general learning objectives for this course include the following ABET Outcomes:

Outcome 5: Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline. Apply computer science theory and software development fundamentals to produce computing-based solutions.

The primary key to this course is its practicality and direct relationship to the types of things you will be doing in the real-world. The goal is to equip you with a broad set of tools and ideas that will prepare you for real-world software engineering.

Course Expectations and Policies

4.1 Class Home Page

This class will use Canvas software for our home page. The URL for the home page is <https://canvas.ou.edu>. Log in with your 4+4 using your standard OU password. If you have difficulty logging in, call 325-HELP. This software provides a number of useful features, including a list of assignments and announcements, an electronic mailing list, newsgroups, and grade book. I will use this web site for all updates. I may update the Canvas page several times a week. When I update the site in any significant way, I will post an announcement on Canvas telling you what has been added and where it is located. You are responsible for things posted on the site within 48 hours of the post.

Note that you can configure Canvas to send you email whenever a new piece of information is posted. You should check the site regularly.

4.2 Class Attendance

You are expected to attend all of the lectures in which you are enrolled. Class attendance is important because we will discuss/clarify concepts. You are responsible for everything that is announced in class, independent of whether you choose to attend or not.

4.3 Class Email

Urgent announcements will be sent through Canvas email. It is your responsibility to:

- Regular read your university-supplied email or have it forwarded to a location where you do regularly read email. I will send out a test message during the first week of class. If you do not receive this message, it is your responsibility to get the problem resolved.
- Have your email program set up so that replying to your email will work correctly. You can send email to yourself and reply to yourself to test this. If you need assistance in accomplishing any of these tasks, contact 325-HELP. You are responsible for reading emails within 24 hours.

Please put CS3203 as the first word in the subject line of your email.

Learning Activities and Assessment

5.1 Grading Questions

If there is a dispute about the grading of a homework problem, you may stay after class the day the tests are returned to discuss it. If you cannot stay at this time, return the paper to me and stop by during my office hours. Once homework has been removed from the classroom after it has been returned, the grade is final and will not be changed, even if it is found to be in error.

- Homework: Grading questions for projects, reports and homework that are graded by the TA should first be brought to the same TA. If this does not resolve your question, please see the instructor.
- Others: All other grading questions may be brought to the instructor.
- Please note that when a homework is brought with grading questions, we may examine the entire assignment and your final grade may end up lower. All disagreements about scores must be brought to our attention within one week of when the item is returned.

5.2 Final Grade

The course grade will be determined by the average of the individual homework, and group projects. The final letter grading for the course will be as follows: A \geq 90%, B = 89-80%, C = 79-70%, D = 69-60%, F = $<$ 60%. The instructor will round all averages to two significant figures (69.5 will round to 70 and 69.4 will round to 69) to determine the student's letter grade in the course (70 = C, 69 = D). There is no curve in this course. The instructor reserves the right to make linear adjustments to quiz and final exam grades in cases where a quiz or exam question was found to be in error or unreasonably difficult.

5.3 Canvas Grade Summary

Canvas has a grade book that is used to store the raw data that is used to calculate your course grade. It is the responsibility of each student in this class to check their grades on Canvas after each project or homework is returned. If an error is found, bring the grading document to me, and I will correct it.

5.4 Course Grade

There are six components to the course grade. They are weighted as follows:

<i>Category</i>	<i>Percent of Final Grade</i>
Homework	20%
Term Project	55%
Project Proposal	(5%)
Progress presentation	(10%)
Code review	(5%)
Projects	(20%)
Final report + presentations	(15%)
Class participation	10%
Exams	15%
Total	100%

Course Coverage and Procedures

6.1 Teamwork Issues

The workloads of teams are expected to be evenly distributed among the members. One will risk losing all or part of the project grade if he does not make a fair contribution.

6.2 Backup Copies of Projects

It is the student responsibility to backup their files appropriately. No extensions to deadlines will be given as a result of lost files unless there is a massive, network-wide problem that affects the entire class. Do not rely on anyone else to backup your important files. Configure OneDrive that is a part of your Office365 to make backing up your work a routine part of computer usage. It is particularly important to save a backup copy of any project that is submitted. This backup version should not be opened or edited after submission in case something goes wrong with the submission system.

Course Policies

7.1 Make-up Policy

Although the instructor does not expect a student to miss an assignment, if a student does miss an assignment for a legitimate, verifiable reason, the instructor will work with the student to provide an opportunity for make-up work.

7.2 Absences

Attending every lecture is highly recommended and expected. Not attending class will have an indirect negative effect on your grade. If low attendance to lectures becomes problematic, the instructor reserves the right to use attendance as extra-credit. Students are expected to stay in touch with their project group partners to facilitate communication during problem-solving sessions in class.

7.3 Civility

All students are expected to follow proper classroom behavior and treat other students and the instructor with respect. If the instructor deems a student's actions or behavior disruptive to the class, the students will be asked to leave the class for that day.

7.4 Emergency Contact

In case of family or medical emergencies, students should send an email jpark@ou.edu. Once the emergency has passed, the student can meet with the instructor to discuss what material/assignments the student has missed and what steps would be beneficial to aid the student in continued success in the course.

7.5 Changes in the Syllabus

As the course develops, it might be desirable/necessary to make appropriate changes in aspects of this syllabus. The instructor reserves the right to make changes if desirable or necessary.

University Policies

8.1 Academic Integrity

All work submitted for an individual grade, such as homework and individual reports, should be the work of that single individual: not their friends or tutor. **Please ask me if you are in doubt before you collaborate with others. You have to work individually unless it is stated that a collaboration is allowed.**

- Do not show another student a copy of your homework or individual projects before the submission deadline. The penalties for permitting your work to be copied are the same as the penalties for copying someone else work.
- If you choose to do your work on your computer, make sure that your computer account is properly protected. Use a good password, and do not give your friends access to your account or your computer system. Do not leave printouts, or thumb drives around a laboratory where others might access them.
- Upon the first documented occurrence of collaborative work, I will report the academic misconduct to the Campus Judicial Coordinator. The procedure to be followed is documented in the University of Oklahoma Academic Misconduct Code (http://integrity.ou.edu/summary_of_the_process.html). In the unlikely event that I elect to admonish the student, the appeals process is described in <http://www.ou.edu/provost/integrity-rights/> .
- If you work with anyone else in completing an assignment, you must include that person's name on the submitted work. Failure to list a student you worked with on the assignment is a violation of academic integrity. If I find that the submitted work appears to be plagiarized, all students involved will be invited to my office individually to explain the work and/or perform similar work. The instructor will determine whether plagiarism occurred based on the match between the depth of understanding of the material displayed in the assignment and the individual interviews.
[See http://integrity.ou.edu/faculty_guide.html]
- Cheating is strictly prohibited at the University of Oklahoma, because it devalues the degree you are working hard to get. As a member of the OU community it is your responsibility to protect your educational investment by knowing and following the rules. For specific definitions on what constitutes cheating, review the Student's Guide to Academic Integrity at http://integrity.ou.edu/students_guide.html.
- For group projects, communication is expected between group members. However, communication about the solution to a project between groups is disallowed. Doing so is considered cheating.
- You may make use of the net as a reference as you are working on assignments. For projects, these references must be explicitly documented in your code. However, downloading or deriving specific solutions from the net is considered cheating.

8.2 Code Sharing for Group Projects

If you are keeping your code on GitHub, you have to keep your code in private repositories.

8.3 Religious Observance

It is the policy of the University to excuse the absences of students that result from religious observances and to reschedule examinations and additional required classwork that may fall on religious holidays, without penalty. [See Faculty Handbook 3.15.2 (<https://apps.hr.ou.edu/FacultyHandbook#3.15.2>).]

8.4 Reasonable Accommodation Policy

Students requiring academic accommodation should contact the Disability Resource Center for assistance at (405) 325-3852 or TDD: (405) 325-4173. For more information please see the Disability Resource Center website <http://www.ou.edu/drc/home.html>. Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact me personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunities.

8.5 Title IX Resources and Reporting Requirement

For any concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocates on-call 24/7, counseling services, mutual no contact orders, scheduling adjustments and disciplinary sanctions against the perpetrator. Please contact the Sexual Misconduct Office 405-325-2215 (8-5, M-F) or OU Advocates 405-615-0013 (24/7) to learn more or to report an incident. For more information, visit <http://www.ou.edu/eoo.html>.

8.6 Adjustments for Pregnancy/Childbirth Related Issues

Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact me as soon as possible to discuss. Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. Please see www.ou.edu/content/eoo/faqs/pregnancy-faqs.html for commonly asked questions.

8.7 Final Exam Preparation Period

Pre-finals week will be defined as the seven calendar days before the first day of finals. Please refer to OU's Final Exam Preparation Period policy (<https://apps.hr.ou.edu/FacultyHandbook#4.10>).

Emergency Protocol

During an emergency, there are official university procedures that will maximize your safety.
<http://www.ou.edu/emergencypreparedness/procedures>

9.1 Severe Weather

If you receive an OU Alert to seek refuge or hear a tornado siren that signals severe weather:

1. LOOK for severe weather refuge location maps located inside most OU buildings near the entrances
2. SEEK refuge inside a building. Do not leave one building to seek shelter in another building that you deem safer. If outside, get into the nearest building.
3. GO to the building's severe weather refuge location. If you do not know where that is, go to the lowest level possible and seek refuge in an innermost room. Avoid outside doors and windows.
4. GET IN, GET DOWN, COVER UP.
5. WAIT for official notice to resume normal activities.

Link to Severe Weather Preparedness - Video: <https://vimeo.com/237922159>

9.2 Fire Alarm/General Emergency

If you receive an OU Alert that there is a danger inside or near the building, or the fire alarm inside the building activates:

1. LEAVE the building. Do not use the elevators.
2. KNOW at least two building exits
3. ASSIST those that may need help
4. PROCEED to the emergency assembly area
5. ONCE safely outside, NOTIFY first responders of anyone that may still be inside building due to mobility issues.
6. WAIT for official notice before attempting to re-enter the building.

Link to OU Fire Safety on Campus - <https://vimeo.com/125093634>

9.3 Armed Subject/Campus Intruder

If you receive an OU Alert to shelter-in-place due to an active shooter or armed intruder situation or you hear what you perceive to be gunshots:

1. GET OUT: If you believe you can get out of the area WITHOUT encountering the armed individual, move quickly towards the nearest building exit, move away from the building, and call 911.
2. HIDE OUT: If you cannot flee, move to an area that can be locked or barricaded, turn off lights, silence devices, spread out, and formulate a plan of attack if the shooter enters the room.
3. TAKE OUT: As a last resort fight to defend yourself.

Link to OU Fire Safety on Campus - <http://www.ou.edu/emergencypreparedness/procedures/active-shooter>

9.4 COVID-19 Policies and Guidance

For classroom-related policies and guidance related to COVID-19, please refer to the following website: <https://www.ou.edu/together/instructional-faculty>.