

University of Oklahoma  
College of Engineering  
**Computer Science 5213**  
Software Engineering Processes  
Spring 2022 Syllabus

## General Information

**Class Time:** Tuesday and Thursday 9:00 am - 10:15 am  
**Class Location:** Carson Engineering Center, 441  
**Prerequisites:** CS 3113 or CS 3823 or CS 5005  
**Learning Management System:** <https://canvas.ou.edu>

### Instructor and Office Hours:

Name	Office	Hours	Email
Rafal Jabrzemski	DEH 235	10:30 am - 12:30 pm	rjabrzemski@ou.edu
	DEH 235	10:30 am - 12:30 pm	

### Important Dates

<b>First Day of Class</b>	January 18
<b>Final Exam</b>	May 13, 2022, 8:00 am - 10:00 am

## Text and Course Materials

**Required Materials:**  
None

### 2.1 Ownership of Course Materials

The instructor retains ownership and all rights to 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 is a team project course focused on practical application of common, modern techniques to all aspects of software project development. Students will learn about effective processes for software requirements specification, planning, design, documentation, development, review, defect tracking, testing, product delivery, and product evaluation. There is some emphasis on resource tracking and software quality. Students will work in teams to develop, deliver, and evaluate software products.

## 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>. Login 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. You should check the site regularly.

## 4.2 Class Attendance

Class attendance is important because we will discuss/clarify concepts and examples that are may not be in the text book. You are responsible for everything that is announced in class, independent of whether you choose to attend or not. In class students may be required to work in small groups. Additionally, graded quizzes will be given in class. Students who do not attend will not get credit for quizzes or group assignments.

## 4.3 Class Email

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

- Regular read your university supplied e-mail or have it forwarded to a location where you do regularly read e-mail. 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 **CS5213** as the first word in the subject line of your email.*

# Learning Activities and Assessment

## 5.1 Quizzes

The quizzes will consist of questions about the material from required reading material and discussions, and previous homework questions.

## 5.2 Project

The major activity in the class is participation in a project to develop a software application. Throughout the lifecycle of this project, students will have the opportunity to serve on different teams and gain experience in different roles within each team. A team is made up of three to eight members, and the responsibilities of each team, as well as its membership, may change throughout the software development process. The project will go through several process phases, including:

- Project proposal
- Requirement analysis
- System specification
- Architecture design
- Construction
- Product demonstrations
- User testing
- Evaluation

Note that the processes are not of equal length, and some processes may go through multiple iterations. Furthermore, some processes may overlap. Each process requires appropriate reporting and/or presentations.

### 5.3 Project Grading

Because the project is a team effort a portion of your grade for it will be based on the evaluation of how the team met the projects' goals as a whole. A portion of your individual grade will also be calculated independent of other team members' performance/effort, based on student evaluations.

### 5.4 Examination Grading Questions

If there is a dispute about the grading of an examination 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 a test 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.

### 5.5 Examinations

There will be one midterm examination and a final examination. Missing an examination without a previously approved excuse will result in a grade of zero for that examination. If an examination is missed for a verifiable, documented, and approved reason the percentage of the grade coming from the final examination will be adjusted to compensate. Makeup examinations are never available, except as required by University policy.

### 5.6 Final Examination

The final examination is on May 9th, 2018, 1:30pm - 3:30pm in our regular classroom, Carson Engineering Center, 0439. The final is comprehensive, as required by College of Engineering policy. No final examinations can be given early, except as required by University policy.

### 5.7 Final Grade

The course grade will be determined by the average of the quizzes, discussions, and Final Exam. 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.

### 5.8 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.

### 5.9 Course Grade

These are the components to the course grade. They are weighted as follows.

<i>Component</i>	<i>Percent</i>
Homework	10
Projects	50
Project Participation	10
Presentations	15
Exams	15

## 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 Incomplete

Due to the teamwork nature of this course, a grade of Incomplete cannot be granted.

### 6.3 Material Covered

Most or all chapters in Sommerville will be covered.

### 6.4 Software Tools

Various software development and analysis tools will be presented and used during the course of the software development project. Some tools will be recommended and their use is optional and some will be required. No commercial software requiring monetary cost will be required. Using commercial software optionally without proper licensing is illegal, unethical, and unacceptable in this class.

### 6.5 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. There will not be assigned seating in the lecture, but students are expected to sit next to their study 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 e-mail (rjabrzemski@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 Misconduct

All work submitted for an individual grade, such as quizzes, should be the work of that single individual: not their friends or tutor.

- Do not show another student a copy of your homework or projects before the submission deadline. The penalties for permitting your work to be copied are the same as the penalties for copying someone else's 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](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](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](http://integrity.ou.edu/students_guide.html).

To be successful in this class, all work on exams and quizzes must be yours and yours alone. You may not receive outside help. On examinations and quizzes you will be informed about permissible study aids. Should you see someone else engaging in this behavior, I encourage you to report it to myself. That student is devaluing not only their degree, but yours, too. Be aware that it is my professional obligation to report academic misconduct, which I will not hesitate to do. Sanctions for academic misconduct can include expulsion from the University and an F in this course, so don't cheat. It's simply not worth it.

## 8.2 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> ).]

## 8.3 Reasonable Accommodation Policy

There is not specific language for the Reasonable Accommodation policy to be included in the syllabus. It is good to become familiar with the policy and describe it in your own words. Including the link to Disability Resources Center is encourage, <http://www.ou.edu/drc/home.html> . [See Faculty Handbook (<https://apps.hr.ou.edu/FacultyHandbook#5.4> ).]

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.

## 8.4 Title IX Resources and Reporting Requirement

For any concerns regarding gender-based discrimination, sexual harassment, sexual assault, dating/domestic violence, or stalking, the University offers a variety of resources. To learn more or to report an incident, please contact the Sexual Misconduct Office at 405/325-2215 (8 to 5, M-F) or [smo@ou.edu](mailto:smo@ou.edu). Incidents can also be reported confidentially to OU Advocates at 405/615-0013 (phones are answered 24 hours a day, 7 days a week). Also, please be advised that a professor/GA/TA is required to report instances of sexual harassment, sexual assault, or discrimination to the Sexual Misconduct Office. Inquiries regarding non-discrimination policies may be directed to: Bobby J. Mason, University Equal Opportunity Officer and Title IX Coordinator at 405/325-3546 or [bjm@ou.edu](mailto:bjm@ou.edu). For more information, visit <http://www.ou.edu/eoo.html>.

## 8.5 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 your professor or the Disability Resource Center at 405/325-3852 as soon as possible. Also, see <http://www.ou.edu/eoo/faqs/pregnancy-faqs.html> for answers to commonly asked questions.

## 8.6 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>