

Computer Science 3202

Software Requirements and Specifications

Fall 2019 Syllabus

1 General Information

Class Time: 9:00 - 10:15 Tuesday and Thursday
Class Location: Dale Hall 0218
Prerequisites: C S 2413 and C S 2813 or MATH 2513

Required Book:

1. *Agile Software Requirements: Lean Requirements Practices for Teams, Programs, and the Enterprise (Agile Software Development Series)*, Dean Leffingwell, 1st edition, Agile Software Development Series, Pearson, 2011

Instructor and Office Hours: Rafal Jabrzemski

Office	Hours	E-mail
DEH 235	Tuesday : 10:30 am - 12:00 pm	rjabrzemski@ou.edu
DEH 235	Wednesday: 3:00 pm - 4:30 pm	

ABET Outcomes

- Outcome 3: Communicate effectively in a variety of professional contexts.
Outcome 4: Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.

1.1 Important Dates

First Day of Class	Tuesday, August 20, 2019
Final Exam	December 12, 2019, 8:00 am - 10:00 am

2 Course Description

You will gain technical and professional skills by performing requirements engineering. You will earn the tools, techniques, and methods for modeling software systems. In addition, you will practice written and oral communication skills and consider the impact of computing on individuals, organizations and society, and demonstrate their ability to engage in lifelong learning by gaining background in a domain outside of their own

3 Course Goals

By the end of this course, you should be able to:

- Know which basic techniques could be used to elicit software requirements
- Know how to organize software requirements
- Avoid common mistakes

4 Course Policies

4.1 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 or group work will be given in class. Students who do not attend will not get credit for quizzes or group assignments.

If circumstances arise that prevent attendance students should contact the instructor as soon as possible before class meets to arrange, if possible, an alternative to any in-class assignment.

4.2 Class Home Page

This class will use Canvas software for our home page. The URL for the home page is <http://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.

4.3 Class Email Alias

Urgent announcements will be sent through 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'll 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.

4.4 Final Examination

Per University policy the final examination is comprehensive.

4.5 Use of Evaluations

The College of Engineering utilizes student ratings as one of the bases for evaluating the teaching effectiveness of each of its faculty members. The results of these forms are important data used in the process of awarding tenure, making promotions, and giving salary increases. In addition, the faculty uses these forms to improve their own teaching effectiveness. The original request for the use of these forms came from students, and it is students who eventually benefit most from their use. Please take this task seriously and respond as honestly and precisely as possible, both to the machine-scored items and to the open-ended questions.

5 Course Coverage and Procedures

5.1 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.

5.2 Material Covered

Most or all chapters' content in *Agile Software Requirements* will be covered.

5.3 Quizzes & Individual Assignments

To balance the team-based Project activity of the course, and lay the theoretical groundwork for the project assignment. There will be individual assignments and regular quizzes given in class during the first part of the course, taken from the lectures and *Agile Software Requirements* textbook.

5.4 Project

The major activity in the latter part of the course is participation in a project to develop a written requirements document for simulated and/or real clients for a simulated and/or real software application.

5.5 Backup Copies of Projects

It is the students' 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.

6 Evaluation

6.1 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.

6.2 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.

6.3 Grading

There are 4 components to the course grade. They are weighted as follows.

<i>Component</i>	<i>Percent</i>
Quizzes/Individual Assignments	35
Group Project Assignment(s)	35
Two Presentations	5 each
Draft Project	5
Final Project	15
Peer Review	5
Midterm	20
Final Exam	10

7 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 email (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.

8 University Policies

8.1 Academic Integrity

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. To be successful in this class, all work on exams and quizzes must be yours and yours alone. You may not receive outside help. Should you see someone else engaging in this behavior, I encourage you to report it to myself or directly to the Office of Academic Integrity Programs. 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.

All work submitted for an individual grade, such as quizzes, 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]
- Programming projects may be checked by software designed to detect collaboration. This software is extremely effective and has withstood repeated reviews by the campus judicial processes.
- Tutors can be an excellent source of support for students who are having difficulty in the class, but only if the tutor is aware of the distinction between teaching students the material so that they can do their own work, and doing work for students. Tutors who do work for students are not only failing to help the students learn, they are abetting academic misconduct. Examples of misconduct include: If your tutor is sitting behind you while you are typing and methodically telling you what to enter, he or she is abetting academic misconduct. If your tutor is emailing files containing partial or complete programming projects to you, you will commit academic misconduct if you use those lines in your program. More effective use of tutoring services is to do problems that are similar to the assigned work, instead of doing assigned work. For example, it would be fine to work unassigned problems from the textbook with a tutor. This requires significant discipline, both on the part of the tutor and the part of the student. Copying from a tutor is as unacceptable as copying from another student. If your tutor doesn't know how to teach properly, please ask them to call or visit me and I will provide training and guidance. If you are tutoring someone else in the class, you can be accused of academic misconduct if this person copies your work.
- 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.

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.

- Feel free to discuss all assignments with the instructor or the TAs. However, do not discuss, look at, or copy another student's solution to a Zyante or lab assignment. Doing so is considered cheating. 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

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.

8.5 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. 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. 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 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.

8.7 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>).

9 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>