



Course Number: SE4351.001
Course Name: Requirements Engineering (3 Semester Credit Hours)
Term: Spring 2025
Meetings: Tue & Thu 2:30pm - 3:45pm (**GR 2.530**)

Professor Contact Information

Professor: Dr. Barbara Maweu
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Email Address: barbara.maweu@utdallas.edu
Office Hours: T/Th 11:30am – 1:00pm, or by appointment - Link in *MS Teams Link* folder

TA/Grader Contact Information

TA:
Email:
Office Hours:

Grader:
Email:
Office Hours:

Course Pre-requisites, Co-requisites, and/or Other Restrictions

- Prerequisites: SE 3306 (Mathematical Foundations of Software Engineering) & CS / SE / CE 3354 (Software Engineering)

Course Description

- Introduction to system and software requirements engineering.
- The requirements engineering process, including requirements elicitation, specification, and validation. Essential words and types of requirements.
- Structural, informational, and behavioral requirements. Non-functional requirements.
- Scenario analysis. Conventional, object-oriented and goal-oriented methodologies.

Student Learning Objectives/Outcomes

After successful completion of this course, the students are expected to gain these:

1. Ability to specify and follow a requirement engineering process
2. Ability to identify and collect requirements from various sources such as safety-, health- and welfare applications with global, social, cultural, economic and environmental concerns, and resolve conflicting requirements
3. Ability to specify and validate requirements with traceability
4. Ability to model functional and non-functional requirements, including safety, health and welfare requirements
5. Ability to model and analyze security requirements
6. Understand tools for software requirements engineering.

Textbooks and Materials

Required:

- Mastering the Requirements Process: Getting Requirements Right (3rd Edition) by Suzanne Robertson & James Robertson
ISBN-13: 978-0321815743 or ISBN-10: 0321815742

Recommended:

- Requirements Engineering for Software and Systems (4th Edition) by Phillip A. Laplante, Mohamad Kassab
ISBN-13: 978-1032275994 or ISBN-10: 1032275995

PROJECT:

Team assignments will be determined by the instructor.

- Class time may be designated for group work, but you are also responsible for collaborating outside of scheduled class hours.
- Each team will independently determine its own work processes and task allocation.
- One team member will be responsible for submitting the completed assignment on behalf of the entire team.

It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures.

You are expected to work with your team actively and professionally. Discussions with your teammates about the project can be an important part of learning.

EXAMS:

There will be three exams. Exams will be administered online in the eLearning / Testing Folder.

Exams will be held in the Testing Center. **You must register with the Testing Center at least two days before the exam.**

Grading Policy

Grading (credit) Criteria

Quizzes	10%
Homework	15%
Project Assignments	20%
Exam 1	15%
Exam 2	15%
Exam 3	25%

Grading Schema

98-100	A+	88-89.99	B+	78-79.99	C+	68-69.99	D+	Below 60	F
92-97.99	A	82-87.99	B	72-77.99	C	62-67.99	D		
90-91.99	A-	80-81.99	B-	70-71.99	C-	60-61.99	D-		

There will be no curving of grades.
 Note that this means an 89.99 is a B+ to illustrate what “no curving” means.

Academic Calendar

(Tentative and subject to change - Topics, Reading Assignments, Due Dates, Exam Dates)

WEEK	DATES	COURSE CHAPTER	READING ASSIGNMENT
1	01/21 – 01/23	Syllabus & Course Overview Ch 1: Requirements Fundamentals	Read Ch 1
2	01/28 – 01/30	Ch 2: The Requirements Process	Read Ch 2
3	02/04 – 02/06	Ch 3: Scoping the Business Problem Ch 4: Business Use Cases	Read Ch 3 Read Ch 4
4	02/11 – 02/13	Ch 5: Investigating the Work	Read Ch 5
5	02/18 – 02/20	Ch 6: Scenarios	Read Ch 6
	02/20	Exam # 1	
6	02/25 – 02/27	Ch 7: Understanding the Real Problem	Read Ch 7
7	03/04 – 03/06	Ch 8: Starting the Solution	Read Ch 8
8	03/11 – 03/13	Ch 9: Strategies for Today’s Business Analyst	Read Ch 9
9	03/18 – 03/20	Spring Break – No Classes	
10	03/25 – 03/27	Ch 10: Functional Requirements	Read Ch 10
11	04/01 – 04/03	Ch 11: Non-functional Requirements	Read Ch 11
12	04/08 – 04/10	Ch 12: Fit Criteria and Rationale	Read Ch 12
13	04/15 – 04/17	Ch 13: The Quality Gateway	Read Ch 13
	04/17	Exam # 2	
14	04/22 – 04/24	Ch 14: Requirements and Iterative Development	Read Ch 14
15	04/29 – 05/01	Ch 15: Reusing Requirements Ch 16: Communicating the Requirements	Read Ch 15 Read Ch 16
16	05/06 – 05/08	Ch 17: Requirements Completeness	Read Ch 17
17	05/13	Exam # 3	

General Course and Instructor Policies

Make-up Exams	To ensure fair treatment of each student, a make-up exam can only be offered in case of an emergency such as health, University approved travel, birth, death and should be accompanied by an official document (doctor’s note, birth/death certificate, University approved travel authorization) with the condition that the arrangements are made BEFOREHAND.
Extra Credit	There will be no extra credit work.

Grading Criteria	All assignments, quizzes and exams (other than the term project) are to be individual efforts. Please do not collaborate with other students. Copying assignments or exams, in whole or in part, from other sources will be considered an act of scholastic dishonesty. This policy includes copying from other students, from assignments/quizzes from previous semesters or from the Internet.
Class Materials	<p>Class materials include syllabus, weekly course slides, assignments, quizzes, and will be made available in eLearning to all students registered for this class as they are intended to supplement the classroom experience.</p> <p>These materials may be downloaded during the course; however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.</p>
Final Grade Policy	<p><i>Please note that requests for re-grades or grade adjustments will NOT be considered at the end of the semester.</i></p> <p>It is imperative that students maintain consistent effort and engagement throughout the course to avoid unexpected outcomes.</p> <p>Timely completion of class work and timely effort to seek clarification on any doubts will significantly contribute to a positive academic experience.</p>
Late Work and Grade Consideration.	<p><i>A 10% reduction in grade per day will be applied to late work submitted within 3 days of the due date.</i></p> <p>No late work will be accepted beyond this period, resulting in a zero (0) grade.</p> <p><i>Students have a 7-day window to contact the TA or Grader regarding any grade concerns for class work, quizzes, homework, assignments, or exams.</i></p> <p>No requests for grade reconsideration will be accepted after this period.</p>
Quizzes	<ul style="list-style-type: none"> • Quizzes will occur every Friday, covering the chapter material discussed during class. • Exceptions will be announced via email (there will be no quizzes during exam weeks or the final week of class). • Quizzes are open books and open notes. Do not search on the Web for a solution to a problem. • Quizzes may be taken between 8:00AM Fridays to 11:59PM Sundays. • Quizzes may be excused; quizzes cannot be made up; excused absences result in a zero (0) grade. • Requests to make-up missed quizzes will NOT be considered. • Quizzes will be administered online in the eLearning/Testing Folder. • Quizzes will last 45 minutes from the time it starts (and then will be automatically submitted). • Quiz results will be available in eLearning after the due date/time.
Class Attendance	<p>Regular and punctual class attendance is expected regardless of course modality. Students who fail to attend class regularly are inviting scholastic difficulty.</p> <p>It is the student's responsibility to attend the lectures in person. To benefit the most from this class, please attend classes, engage in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures. Also note that you should not assume that you will pass this class. The</p>

	grade you get will be the grade you get.
Use of Generative AI	<p>You are allowed to use generative AI tools, such as ChatGPT and Microsoft Copilot, as an aid in doing classwork.</p> <p>You are not allowed to use these tools to do your work.</p> <p>If you use a generative AI tool, you must cite it as you would any other resource.</p>
Connectivity Problems	<p>Online quizzes and exams may be subject to connection interruptions due to network problems.</p> <p>If you experience a disconnection, the exam timer will continue to run. If you can quickly re-establish your connection, you may be able to resume without penalty.</p> <p>Should you encounter persistent connectivity issues, please contact the exam proctor for assistance.</p>
Class Participation	<p>Regular class participation is expected. Students who fail to participate in class regularly are inviting scholastic difficulty.</p> <p>Successful participation is defined as consistently adhering to the University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the Student Code of Conduct.</p> <p>Texas Senate Bill 17, the recent law that prohibits diversity, equity, and inclusion programs and activities at public universities in Texas, does not in any way apply to academic course instruction.</p>
Class Recordings	<p>Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the AccessAbility Resource Center has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved AccessAbility Resource Center accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.</p> <p>The instructor may record meetings of this course. These recordings will be made available to all students registered for this class if the intent is to supplement the classroom experience. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law.</p>
Classroom Citizenship	<p>Respect for your classmates and professor is always necessary. <i>Students are expected to silent mobile phones and not talk during class except as part of class discussions. Turn off the sound and put them out of reach.</i></p> <p>Computers are allowed only for taking notes and class- related activities, not for other class activities. If you are doing other work in class, you will be asked to leave and marked absent.</p>
Student Conduct and Discipline	<p>The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business.</p> <p>It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General</p>

	<p>information on student conduct and discipline is contained in the UTD publication, <i>A to Z Guide</i>, which is provided to all registered students each academic year.</p> <p>The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the <i>Rules and Regulations, Board of Regents, The University of Texas System, Part 1, Chapter VI, Section 3</i>, and in Title V, Rules on Student Services and Activities of the university's <i>Handbook of Operating Procedures</i>. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391).</p> <p>A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.</p>
Withdrawal from Class	<p>The administration at UT Dallas has established deadlines for withdrawal from any course. These dates and times are published in the Comet Calendar and in the Academic Calendar. It is the student's responsibility to handle withdrawal requirements from any class. In other words, a professor or another instructor cannot drop or withdraw any student unless there is an administrative drop such as the following:</p> <ul style="list-style-type: none"> • Not meeting the prerequisites for a specific course • Not satisfying the academic probationary requirements, resulting in suspension • An Office of Community Standards and Conduct request • Not making appropriate tuition and fee payments • Enrollment is in violation of academic policy • Not admitted for the term in which they registered <p>It is the student's responsibility to complete and submit the appropriate forms to the Registrar's Office and ensure that he or she will not receive a final grade of "F" in a course if he or she chooses not to attend the class after being enrolled.</p> <p>Undergraduate students: please review the Dropping and Withdrawing section in the catalog. Wed., Feb. 5, 2025 Undergraduate Courses</p>
Academic Integrity	<p>The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.</p> <p>Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work or material that is not one's own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject referral to the OCSC for disciplinary proceedings.</p> <p>Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective.</p> <p><i>Students are expected to cite the work of others when appropriate using an acceptable citation style. You are expected to do your own work!</i></p>

Email Use	<p>The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange.</p> <p>The university encourages all official student email correspondence be sent only to a student’s U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account.</p> <p><i>If you send an email to the Instructor, TA or the Grader, include which class you are discussing in the email (including the section number). eLearning’s “U.T Dallas email” can be used to send email to the Instructor, TA or Grader and includes the class info.</i></p> <p>This allows the university to maintain a high degree of confidence in the identity of all individual corresponding and the security of the transmitted information. UTD furnishes each student with a free email account that is to be used in all communication with university personnel.</p> <p>The Department of Information Resources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.</p>
Student Grievance Procedures	<p>Procedures for student grievances are found in the university policy UTDSP5005. In attempting to resolve any student grievance regarding disputes over grades, application of degree plan, graduation/degree program requirements, and thesis/and dissertation committee, adviser actions and/or decisions, evaluations, and/or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originated.</p>
Off-Campus Instruction and Course Activities	<p>Off-campus, out-of-state, and foreign instruction and activities are subject to state law and University policies and procedures regarding travel and risk-related activities. Information regarding these rules and regulations may be found at http://www.utdallas.edu/BusinessAffairs/Travel_Risk_Activities.htm. Additional information is available from the office of the school dean.</p>
Incomplete Grades	<p>As per university policy, incomplete grades may be given at the discretion of the instructor of record for a course, when a student has completed at least 70% of the required course material but cannot complete all requirements by the end of the semester. An incomplete course grade (grade of 'I') must be completed within the time period specified by the instructor, not to exceed eight (8) weeks from the first day of the subsequent long semester.</p> <p>Upon completion of the required work, the grade of 'I' may be converted into a letter grade (A through F). If the grade of Incomplete is not removed by the end of the specified period, it will automatically be changed to a grade of F. The incomplete grade policy is included in the online UT Dallas Undergraduate Catalog.</p>
Accommodations for Students with Disabilities	<p>The University of Texas at Dallas is committed to providing reasonable accommodations for all persons with disabilities. The syllabus is available in alternate formats upon request. If you are seeking classroom accommodations under the Americans with Disabilities Act (2008), you are required to register with the AccessAbility Resource Center (ARC), located in the Administration Building, Suite 2.224. They can be reached by email, calling 972-883-2098, or at their website. To receive academic accommodations for this class, please register and request services by completing the Request for Services form with the proper documentation and meeting with the Director of ARC at the beginning of the semester.</p>

Religious Holy Days	<p>The University of Texas at Dallas will excuse a student from class or other required activities, including examinations and travel time, for the observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, of the <i>Texas Tax Code</i>.</p> <p>Students are encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment.</p> <p>Excused students will be allowed to take missed exams or complete assignments within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.</p> <p>If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the school's vice or associate dean, who serve as the President's designees for these rulings. The vice and associate deans must take into account the legislative intent of <i>Texas Education Code 51.911(b)</i>, and the student and instructor will abide by the decision of the vice or associate dean.</p>
UT Dallas Syllabus Policies and Procedures	<p>The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.</p> <p>Please go to http://go.utdallas.edu/syllabus-policies for these policies.</p>

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.