University of North Texas at Dallas

Fall 2025

Syllabus for Distance Learning

CSCE4444: Software Engineering (3 hrs)	
School	Business
Program	Information Technology
Instructor name	Dr. Saif Al-Sultan
Office Location	FH-222
Office Phone	9723381539
Email Address	Saif.alsultan@untdallas.edu
Office Hours	Monday and Wednesday from 9:30 am – 10:00 am, and from 2:30 pm – 4:00 pm. Tuesday from 10:00 am – 2:00 pm on Teams. **Or by appointments**
Course Format/Structure	Online
Classroom Location	Online
Class Meeting Days & Times	Online
Course Catalog Description	Modular design and implementation of software systems. Topics include requirements and specifications development, documentation of the design using current design tools such as UML, testing of software implementation, and system and user documentation.
Prerequisites	CSCE2110
Corequisites	N/A
Required Text	Software Engineering, Ian Summerville, 10th edition, 2016, ISBN: 9780133943030
Recommended Texts and References	
Recommended Technology	You will need a computer for this course.

Access to Learning Resources	**UNT Dallas Library:**
	     Phone: (972) 338-1616;
	     Website URL: http://www.untdallas.edu/library
	UNT Dallas Bookstore:
	     Phone: (972) 780-3652;
	     Website URL: http://www.untdallas.edu/bookstore
	Email: untdallas@bkstr.com

Canvas Resources Supported Browsers: • Chrome 67 & 68 • Firefox 60 & 61 • Flash 29, 30 (for audio/video)	**Getting Help with Canvas:** **Canvas 24/7 Phone Support for Students: 1-833-668-8634** **Canvas Help Resources:** **Canvas Student Guide -** https://community.canvaslms.com/docs/DOC-10701

• Respondus Lockdown Browser
• Safari 10, 11
 	
Supported Devices:
• iPhone
• Android
• Chromebook
Note: Tablet users can use the Canvas app
 	
Screen Readers:
• VoiceOver (Safari)
• JAWS (Internet Explorer)
• NVDA (Firefox)
Note: There is no screen reader support for Canvas in Chrome
	For additional assistance, contact Student Assistance (UNT Dallas Distance Learning):
	    DAL1, Room 157
	    Phone: 972-338-5580
	    Email: distancelearning@untdallas.edu
	
	If you are working with Canvas 24/7 Support to resolve a technical issue, please keep me updated on the troubleshooting progress.
	
	If you have a course-related issue (e.g., course content, assignment trouble, quiz difficulties), please contact me during office hours or by email.	

Course Goals: This course introduces students to core topics and methodology of software development. This course discusses programming concepts, system analysis and design, principles of software engineering, development and support processes, methodologies, and product management. This course covers the complete life cycle of a software system, from inception to release and support.

Student Learning Outcomes: Upon successful completion of this course, the student will be able to:

LO 1: Explain the fundamental concepts of software engineering, including the role of software processes and the principles of Agile software development.

LO 2: Describe the process of requirements engineering, including techniques for gathering, documenting, and validating software requirements.

LO 3: Create UML diagrams to model system behavior and structure and analyze the effectiveness of these models in representing system requirements.

LO 4: Explain the concepts of software architectural design and how architectural patterns influence the structure and behavior of software systems.

LO 5: Understand the principles of software design and implementation and describe the key steps in software testing and their role in ensuring software quality.

Online Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated via class email or Canvas announcement. Additional readings and activities may be added, these will be noted in the Readings and Activities/Assignments sections.

Weeks	Topics	Reference in the Text	Activities	Due Dates
Week 1 (8/25)	• Introduction	Chapter 1	• Read PowerPoint Slides in the module (Chapter 1). • Complete Quiz 1	• Quiz 1 Deadline: 8/31/25

Week 2 (9/1)	• Software processes	Chapter 2	• Read PowerPoint Slides in the module (Chapter 2). • Complete Quiz 2	• Quiz 2 Deadline: 9/7/25
Week 3 (9/8)	• Agile software development	Chapter 3 **Part 1**	• Read PowerPoint Slides in the module (Chapter 3 – Part 1). • Complete Quiz 3	• Quiz 3 Deadline: 9/14/25
Week 4 (9/15)	• Agile software development	Chapter 3 **Part 2**	• Read PowerPoint Slides in the module (Chapter 3 – Part 2). • Complete discussion topic 1 (Agile Project Management and Scrum).	• Discussion topic 1 (Agile Project Management and Scrum) Deadline: 9/21/25
Week 5 (9/22)	• **Exam 1**	**Chapters 1, 2, and 3.**	• **Complete Exam 1**	• **Exam 1** **Deadline: 9/28/25**
Week 6 (9/29)	• Requirements engineering	Chapter 4 **Part 1**	• Read PowerPoint Slides in the module (Chapter 4 – Part 1). • Quiz 4	• Quiz 4 Deadline: 10/5/25
Week 7 (10/6)	• Requirements engineering	Chapter 4 **Part 2**	• Read PowerPoint Slides in the module (Chapter 4 – Part 2). • Complete discussion topic 2 (Requirements Specification).	• Discussion topic 2 (Requirements Specification) Deadline:10/12/25
Week 8 (10/13)	• System modeling	Chapter 5	• Read PowerPoint Slides in the module (Chapter 5). • Quiz 5	• Quiz 5 Deadline: 10/19/25
Week 9 (10/20)	• UML Diagrams	Lecture notes (UML)	• Read lecture notes in the module. • Assignment 1	• Assignment 1 Deadline:10/26/25
Week 10 (10/27)	• Architectural design	Chapter 6	• Read PowerPoint Slides in the module (Chapter 6). • Quiz 6	• Quiz 6 Deadline: 11/2/25
Week 11 (11/3)	• **Exam 2**	**Chapters 4, 5, and 6.**	• **Complete Exam 2**	• **Exam 2** **Deadline:11/9/25**

Week 12 (11/10)	• Design and Implementation	Chapter 7	• Read PowerPoint Slides in the module (Chapter 7). • Quiz 7	• Quiz 7 Deadline: 11/16/25
Week 13 (11/17)	• Software testing	Chapter 8	• Read PowerPoint Slides in the module (Chapter 8). • Quiz 8	• Quiz 8 Deadline:11/23/25
Week 14 (11/24)	• Project Management	Chapter 22	• Read PowerPoint Slides in the module (Chapter 22). • Quiz 9	• Quiz 9 Deadline: 11/30/25
Week 15 (12/1)	• **Exam 3**	**Chapters 7, 8, and 22.**	• **Complete Exam 3**	• **Exam 3** **Deadline: 12/4/25**

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

- Quizzes
- Assignments
- Exams
- Discussion topics.

Grading Matrix

Assessment method	Total
Quizzes	45%
Assignments	4%
Discussion Posts	6%
Exam 1	15%
Exam 2	15%
Exam 3	15%
Total:	100%

Grade Determination

The following standard grading scale will be used to determine your final letter grade:

A = 90% or better

B = 80 – 89 %

 C = 70 – 79 %

D = 60 – 69 %

F = less than 60%

Need tutoring services or just some help with a particular assignment? For tutoring that empowers students to achieve success, schedule an appointment with the Learning Commons today at https://www.untdallas.edu/learning/schedule-appointment/.

Course-Specific Policies

Attendance and Participation Policy:

The University attendance policy is in effect for this course. Please refer to Policy 7.005 Student Attendance at *https://untsystem.policytech.com/dotNet/documents/?docid=1347&public=true*.

Assignment Policy:

All assignments must be completed by the stated due dates. Late assignments will not be accepted, except in case of documented emergencies. Unless otherwise specified, all assignments must be completed individually.

Exam Policy:

Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Policy 7.005 Student Attendance at https://www.untdallas.edu/hr/upol).

Email Policy:

Use your UNTD email account to contact me. You should check your email daily, as you are responsible for all the information I send. I will not discuss grades over the phone and will only respond to emails sent from your UNTD account.

University Policies and Procedures

Students with Disabilities (ADA Compliance):

The University of North Texas at Dallas makes reasonable academic accommodations for students with disabilities. Students seeking accommodation must first register with the Disabilities Services Office (DSO) to verify their eligibility. If a disability is verified, the DSO will provide you with an accommodation letter

to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodation at any time, however, DSO notices of accommodation should be provided as early as possible in the semester to avoid any delays in implementation. Note that a student must obtain a new letter of accommodation for every semester and must meet/communicate with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student.   For   additional   information   see   the   Disability   Services   Office   website   at http://www.untdallas.edu/disability. You may also contact them by phone at 972-338-1777; by email at UNTDdisability@untdallas.edu on the first floor of the Student Center.

Canvas   Instructure   Accessibility   Statement: University of North Texas at Dallas is committed to ensuring that online and hybrid courses are usable by all students and faculty including those with disabilities. If you encounter any difficulties with technologies, please contact our ITSS Department. To better assist them, you would want to have the operating system, web browser and information on any assistive technology being used. The Canvas Instructure Accessibility Statement is provided at https://www.canvaslms.com/accessibility.

NOTE: Additional instructional technology tools, such as Turnitin, Respondus, Panopto, and publisher cartridge content (i.e. MyLab, Pearson, etc.) may NOT be fully ADA compliant. Please contact our Disability Office should you require additional assistance utilizing any of these tools.

Academic Integrity:

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the UNT Dallas Academic Integrity Policy in the appropriate Catalog at http://dallascatalog.unt.edu.

Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabrication of information or citations, facilitating acts of dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students.

Web-based Plagiarism Detection: Please be aware in some courses, students may be required to submit written assignments to Turnitin, a web-based plagiarism detection service, or another method. If submitting to Turnitin, please remove your title page and other personal information.

Classroom etiquette:

Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities,

ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student's Rights, Responsibilities, and Conduct will be referred to the Dean of Students as the instructor deems appropriate (UNTD Policy 7.001 found at https://untsystem.policytech.com/dotNet/documents/?docid=1278&public=true**.**

Classroom Disruption:

Students are expected to always engage with the instructor and other students in this class in a respectful and civil manner to promote a classroom environment that is conducive to teaching and learning. Students who engage in disruptive behavior will be directed to leave the classroom. A student who is directed to leave class due to disruptive behavior is not permitted to return to class until the student meets with a representative from the Dean of Students Office. It is the student's responsibility to meet with the Dean of Students before class meets again and to provide the instructor confirmation of the meeting. A student who is directed to leave class will be assigned an unexcused absence for that class period and any other classes the student misses because of not meeting with the Dean of Students. The student is responsible for material missed during all absences, and the instructor is not responsible for providing missed material. In addition, the student will be assigned a failing grade for assignments, quizzes or examinations missed and will not be allowed to make up the work.

The Code of Student's Rights, Responsibilities, and Conduct (UNTD Policy 7.001 found at https://untsystem.policytech.com/dotNet/documents/?docid=1278&public=true) describes disruption as the obstructing or interfering with university functions or activity, including any behavior that interferes with students, faculty, or staff access to an appropriate educational environment. Examples of disruptive behavior that may result in a student being directed to leave the classroom include but are not limited to: failure to comply with reasonable directive of University officials, action or combination of actions that unreasonably interfere with, hinder, obstruct, or prevents the right of others to freely participate, threatening, assaulting, or causing harm to oneself or to another, uttering any words or performing any acts that cause physical injury, or threaten any individual, or interfere with any individual's rightful actions, and harassment. You are encouraged to read the Code of Student's Rights, Responsibilities, and Conduct for more information related to behaviors that could be considered disruptive.

Course Evaluations:

Student evaluations of teaching effectiveness are a requirement for all organized classes at UNT Dallas. This short survey will be made available to you at the end of the semester via your campus email, providing you a chance to comment on how this class is taught. I (as the instructor) will not have access to the results of the evaluations until after final grades have been posted. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider students' evaluations to be an important part of your participation in this class.

Sexual Harassment, Sexual Misconduct, Intimate Partner Violence and Stalking
UNT Dallas is committed to creating a safe learning environment for all members of our community, free from gender and sex-based discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking, in accordance with Title IX, Texas laws and University Policies. Please note

that all employees are mandated reporters and must report all instances of sexual misconduct, dating violence, sexual assault, domestic violence and stalking to the Title IX Coordinator. If you or someone you know has experienced any form of sex or gender-based discrimination or violence and wish to speak to the Title IX Coordinator, you can email them at titleix@untdallas.edu or file a report here.

Pregnancy, Pregnancy Related Conditions and Parenting Modifications Under Title IX
UNT Dallas is committed to compliance with Title IX, and to supporting the academic success of pregnant and parenting students and students with pregnancy related conditions. If you are a pregnant, have pregnant related conditions or a parenting student (child under one-year needs documented medical care) who wishes to request reasonable related modifications from the University under Title IX, please email the Title IX Coordinator at titleix@untdallas.edu The Title IX Coordinator will work with your professors and academic unit to provide reasonable modifications needed to be supportive of your education while pregnant or as a parent under Title IX.

Bad Weather Policy:

Campus facilities will close, and operations will be suspended when adverse weather and/or safety hazards exist on the UNTD campus or if travel to the campus is deemed dangerous as the result of ice, sleet or snow. In the event of a campus closure, the Marketing and Communication Department will report closure information to all appropriate major media by 7 a.m. That department will also update the UNTD website, Facebook and Twitter with closing information as soon as it is possible. For more information, please refer to http://www.untdallas.edu/police/resources/notifications.

Inclement Weather and Online Classes:

Online classes may or may not be affected by campus closures due to inclement weather. Unless otherwise notified by your instructor via e-mail, online messaging, or online announcement, students should assume that assignments are due as scheduled.

Technology Assistance: To successfully access the materials in Canvas, UNT Dallas advises that your computer be equipped with the minimum system requirements listed on the first page of the syllabus.

If you have trouble accessing or using components of the course, try using Google Chrome browser. If you still experience technical difficulties, first, notify your instructor.

If the problem is still not resolved, call Distance Learning at the phone number listed on the first page of the syllabus. Also, no matter what browser you use, always enable pop-ups.

For more information see:

- UNT Dallas Canvas Technical Requirements: https://community.canvaslms.com/docs/DOC-10721
- Canvas Instructure Support & Unsupported Operating Systems: https://community.canvaslms.com/docs/DOC-10720