University of North Texas at Dallas

Fall 2024

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 2:30 pm – 3:30 pm. Tuesday from 10:00 am – 12:00 pm Thursday from 10:00 am – 2:00 pm on Zoom. **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	
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) • Respondus Lockdown Browser	**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 For additional assistance, contact Student Assistance (UNT Dallas Distance Learning):

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- 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

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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.

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<td colspan="2">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.</td>
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<td colspan="2">Student Learning Outcomes: Upon successful completion of this course, the student will be able to:</td>
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<td colspan="2">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.</td>
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Online/Hybrid 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 (8/26)	• Introduction	Chapter 1	• Read PowerPoint Slides in the module (Chapter 1). • Complete Quiz 1	• Quiz 1 Deadline: 9/1/24

Week 2 (9/2)	• Software processes	Chapter 2	• Read PowerPoint Slides in the module (Chapter 2). • Complete Quiz 2	• Quiz 2 Deadline: 9/8/24
Week 3 (9/9)	• Agile software development	Chapter 3 **Part 1**	• Read PowerPoint Slides in the module (Chapter 3 – Part 1). • Complete Quiz 3	• Quiz 3 Deadline: 9/15/24
Week 4 (9/16)	• Agile software development	Chapter 3 **Part 2**	• Read PowerPoint Slides in the module (Chapter 3 – Part 2). • Complete discussion topic 1.	• Discussion topic 1 Deadline: 9/22/24
Week 5 (9/23)	• **Exam 1**	**Chapters 1, 2, and 3.**	• **Complete Exam 1**	• **Exam 1** **Deadline: 9/29/24**
Week 6 (9/30)	• Requirements engineering	Chapter 4 **Part 1**	• Read PowerPoint Slides in the module (Chapter 4 – Part 1). • Quiz 4	• Quiz 4 Deadline: 10/6/24
Week 7 (10/7)	• Requirements engineering	Chapter 4 **Part 2**	• Read PowerPoint Slides in the module (Chapter 4 – Part 2). • Complete discussion topic 2.	• Discussion topic 2 Deadline:10/13/24
Week 8 (10/14)	• System modeling	Chapter 5	• Read PowerPoint Slides in the module (Chapter 5). • Quiz 5	• Quiz 5 Deadline: 10/20/24
Week 9 (10/21)	• UML Diagrams	Lecture notes (UML)	• Read lecture notes in the module. • Assignment 1	• Assignment 1 Deadline:10/27/24
Week 10 (10/28)	• Architectural design	Chapter 6	• Read PowerPoint Slides in the module (Chapter 6). • Quiz 6	• Quiz 6 Deadline: 11/3/24
Week 11 (11/4)	• **Exam 2**	**Chapters 4, 5, and 6.**	• **Complete Exam 2**	• **Exam 2** **Deadline:11/10/24**
Week 12 (11/11)	• Design and Implementation	Chapter 7	• Read PowerPoint Slides in the module (Chapter 7). • Quiz 7	• Quiz 7 Deadline: 11/17/24

Week 13 (11/18)	• Software testing	Chapter 8	• Read PowerPoint Slides in the module (Chapter 8). • Quiz 8	• Quiz 8 Deadline:11/24/24
Week 14 (11/25)	• Project Management	Chapter 9	• Read PowerPoint Slides in the module (Chapter 9). • Quiz 9	• Quiz 9 Deadline: 12/1/24
Week 15 (12/2)	• **Exam 3**	**Chapters 7, 8, and 9.**	• **Complete Exam 3**	• **Exam 3** **Deadline: 12/8/24**

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
Assignments, quizzes, and discussion topics.	55%
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%

University Policies and Procedures

Students with Disabilities (ADA Compliance):

Chapter 7 (7.004) Disability Accommodations for Students:

The University of North Texas at Dallas makes reasonable academic accommodation for students with disabilities. Students seeking accommodations must first register with the Disability 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 accommodations at any time, however, DSO notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students 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. You may also contact them by phone at 972-338-1777; by email at UNTDdisability@untdallas.edu or in the Student Center Building, 1st floor.

Canvas Instructure Accessibility Statement:

University of North Texas at Dallas is committed to ensuring its 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. Canvas Instructure Course Management System's Accessibility Statement is also provided.

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.

Course Evaluation Policy:

Student's evaluations of teaching effectiveness is a requirement for all organized classes at UNT Dallas. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. 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.

Assignment Policy: (According to the instructor's discretion while working in concert with the division/program's guidelines).

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 in the Student Code of Academic Integrity Code 7.002 for complete provisions of this code.

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 online or hybrid 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 Policies

Online Attendance and Participation:

The University attendance policy is in effect for this course. Class attendance in the Canvas classroom and participation is expected because the class is designed as a shared learning experience, and because essential information not in the textbook will be discussed in the discussion board. Online presence and participation in all class discussions is essential to the integration of course material and your ability to demonstrate proficiency.

Attendance for this online or hybrid course is considered when you are logged in and active in Canvas, i.e., posting assignments, taking quizzes, or completing Discussion Boards. To maintain financial aid award eligibility, activity must occur before the census date of the session or term of the course. Refer to Registrar's Office for specific dates. If you are absent/not active in the course shell, it is YOUR responsibility to let the instructor know immediately, upon your return, the reason for your absence if it is to be excused. All instructors must follow university policy 7.005 covering excused absences; however, it is the instructor's discretion, as outlined in the course syllabus, of how unexcused absences may or may not count against successful completion of the course.

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.

Online "Netiquette":

In any social interaction, certain rules of etiquette are expected and contribute to more enjoyable and productive communication. Emails, discussion board forum threads and/or any other forms of written communication in the online environment should use proper "netiquette" (i.e., no writing in all caps (usually denotes yelling), no curse words, and no "flaming" messages (angry, personal attacks).

Racial, ethnic, or gender slurs will not be tolerated, nor will pornography of any kind.

Any violation of online netiquette may result in a loss of points or removal from the course and referral to the Dean of Students, including warnings and other sanctions in accordance with the University's policies and procedures. Refer to the Student Code of Student Rights Responsibilities and Conduct Code 7.001. Respect is a given principle in all online communication. Therefore, please be sure to proofread all of your written communication prior to submission.

Diversity/Tolerance Policy:

Students are encouraged to contribute their perspectives and insights to class discussions in the online environment. 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 Conduct will be referred to the Dean of Students as the instructor deems appropriate.

Technology Assistance: In order to successfully access the materials in an online or hybrid course, UNTDallas advises that your computer be equipped with the minimum system requirements listed on the first page of the syllabus.

If you experience difficulty 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 Canvas 24/7 Help Desk 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 Canvas Student Guide.