

University of North Texas at Dallas
Fall 2016
SYLLABUS

CSCE 4444.030: Software Engineering		3Hrs
Department of	Mathematics & Information Sciences	School of Liberal Arts & Sciences
Instructor Name:	<i>Dr. Gerard Rambally</i>	
Office Location:	DAL2-229	
Office Phone:	972-780-3093	
Email Address:	gerard.rambally@untdallas.edu	
Office Hours:	Mondays: 2:30 PM – 5:30 PM; Wednesdays: 11:30 AM – 1:00 PM.	
Virtual Office Hours:	9:00 AM – 10:00 AM on Tuesdays and Thursdays or communicate with me by e-mail.	
Classroom Location:	Online	
Class Meeting Days & Times:	This is an online course, except for the three times that you must be present on campus to take the three exams.	
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:	CSCE 2110: Computing Foundations II or CSCE 3110: Data Structures & Algorithms	
Co-requisites:		
Required Text:	Tsui, Frank. <i>Essentials of Software Engineering</i> 3 rd Edition. Jones & Bartlett Learning, 2014. ISBN for Print: 1449691994, ISBN for eText: 1284031462.	
Recommended Text and References:		
Access to Learning Resources:	UNT Dallas Library: phone: (972) 338-1616 web: http://www.untdallas.edu/library email: library@untdallas.edu UNT Dallas Bookstore: phone: (972) 780-3652 web: http://www.untdallas.edu/bookstore e-mail: untdallas@bkstr.com	
Course Goals or Overview:	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:	
1	Demonstrate knowledge of software engineering process models.	
2	Demonstrate knowledge of the limitations of traditional process methodologies and the applicability of Agile processes.	
3	Demonstrate knowledge of the steps of requirements engineering.	
4	Demonstrate knowledge of common software architectural styles and basic techniques for detailed design.	
5	Demonstrate knowledge of the characteristics of good implementations, the role of comments, and techniques for debugging programs.	
6	Demonstrate knowledge of the basic techniques for software verification and validation, and software testing techniques.	

Online/Hybrid Course Outline

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

SCHEDULE	TOPICS	ACTIVITIES	DUE DATES
Week of 8/22/16	1. Writing a Program and Building a System	Listen to the narrated PowerPoint presentation for Topic 1; Complete Assignment #1;	Assign #1: 8/28/16
Week of 8/29/16	2. Engineering of Software	Listen to the narrated PowerPoint presentation for Topic 2; Complete Assignment #2;	Assign #2: 9/4/16
Week of 9/5/16	3. Software Process Models	Listen to the narrated PowerPoint presentation for Topic 3; Complete Assignment #3;	Assign #3: 9/11/16
Week of 9/12/16	4. New and Emerging Process Methodologies	Listen to the narrated PowerPoint presentation for Topic 4; Complete Assignment #4;	Assign #4: 9/18/16
5:30 pm on 9/21/16 in Bld 1, Room 226 at UNT Dallas	Exam 1		
Week of 9/26/16	5. Requirements Engineering	Listen to the narrated PowerPoint presentation for Topic 5; Complete Assignment #5;	Assign #5: 10/2/16
Week of 10/3/16	6. Design: Architecture and Methodology	Listen to the narrated PowerPoint presentation for Topic 6; Complete Assignment #6;	Assign #6: 10/9/16
Week of 10/10/16	7. Design Characteristics and Metrics	Listen to the narrated PowerPoint presentation for Topic 7; Complete Assignment #7;	Assign #7: 10/16/16
Week of 10/17/16	8. Implementation	Listen to the narrated PowerPoint presentation for Topic 8; Complete Assignment #8;	Assign #8: 10/23/16
5:30 pm on 10/26/16 in Bld 1, Room 226 at UNT Dallas	Exam 2		
Week of 10/31/16	9. Testing and Quality Assurance	Listen to the narrated PowerPoint presentation for Topic 9; Complete Assignment #9;	Assign #9: 11/6/16
Week of 11/7/16	10. Configuration Management, Integration, and Builds	Listen to the narrated PowerPoint presentation for Topic 10; Complete Assignment #10;	Assign #10: 11/13/16
Week of 11/14/16	11. Software Support and Maintenance	Listen to the narrated PowerPoint presentation for Topic 11; Complete Assignment #11;	Assign #11: 11/20/16
Weeks of 11/21/16 and 11/28/16	12. Software Project Management	Listen to the narrated PowerPoint presentation for Topic 12; Complete Assignment #12;	Assign #12: 11/30/16
5:30 pm on 12/5/16 in Bld 2, Room 213 at UNT Dallas	Exam 3		

Course Evaluation Methods

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

Grading Matrix:

Instrument	Value (points or percentages)	Total
Assignments	Assignments on each topic with variable weights. There will be a total of 12 assignments. These assignments will involve short answer questions and solving problems to apply the concepts discussed in each topic.	25%
Exam 1 (on campus)	25%	25%
Exam 2 (on campus)	25%	25%
Exam 3 (on campus)	25%	25%
Total:		100%

Grade Determination:

- 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 at <http://www.untDallas.edu/disability>. You may also contact them by phone at 972-338-1777; by email at UNTDisability@untDallas.edu or at Building 2, room 204.

Blackboard Learn 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. Blackboard Learn course management system's accessibility statement is also provided: <http://www.blackboard.com/Platforms/Learn/Resources/Accessibility.aspx>

***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 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, 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:

All assignments are due in class on the due dates stated on the assignments. No late assignments will be accepted, except for documented emergencies. All assignments are to be done individually unless stated otherwise on the assignment.

Exam Policy:

Exams should be taken as scheduled. No makeup examinations will be allowed, except for documented emergencies (See Student Handbook). Note that all exams will be proctored on campus by the instructor.

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 Student Code of Academic Integrity at http://www.untdallas.edu/sites/default/files/page_level2/pdf/policy7.002%20Code%20of%20Academic_Integrity.pdf 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 Blackboard 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 Blackboard, 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 <http://www.untdallas.edu/registrar> 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 messages 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 at <http://www.untdallas.edu/osa/policies>. 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 Requirements:

In order to successfully access the materials in an online or hybrid course, UNT Dallas advises that your computer be equipped with the minimum system requirements.

Blackboard Learn 9.1 is the platform software for this course. Blackboard Learn supports major web browsers such as Windows Internet Explorer, Apple Safari, Mozilla Firefox, and Google Chrome. However, since the latter two are updated continually, some recent versions may not be compatible. If you experience difficulty accessing or using components of the course, try using Internet Explorer. Also, no matter what browser you use, always enable pop-ups. For more information see:

- <http://www.untdallas.edu/dlit/ecampus/requirements>
- <https://blackboard.secure.force.com/publickbarticleview?id=kAB700000008Oom>
- https://learn.unt.edu/bbcswebdav/institution/BrowserCheck/check_full.html