

University of North Texas at Dallas
Fall 2015
SYLLABUS

CSCE 4444.001: 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@unt.edu	
Office Hours:	3:30 PM – 5:30 PM on Mondays, Tuesdays, and Wednesdays or by appointment.	
Virtual Office Hours:		
Classroom Location:	DAL2 303	
Class Meeting Days & Times:	Tuesdays 5:30 PM – 8:20 PM	
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/our-campus/library UNT Dallas Bookstore: phone: (972) 780-3652; e-mail: 1012mgr@fhcg.follett.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	
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.	

Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated in BlackBoard.

TOPICS	TIMELINE
1. Writing a Program and Building a System	Week of 8/25/15
2. Engineering of Software	Week of 9/1/15
3. Software Process Models	Week of 9/8/15
4. New and Emerging Process Methodologies	Week of 9/15/15
Exam 1	9/22/15
5. Requirements Engineering	Week of 9/29/15
6. Design: Architecture and Methodology	Week of 10/6/15
7. Design Characteristics and Metrics	Week of 10/13/15
8. Implementation	Week of 10/20/15
Exam 2	10/27/15
9. Testing and Quality Assurance	Week of 11/3/15
10. Configuration Management, Integration, and Builds	Week of 11/10/15
11. Software Support and Maintenance	Week of 11/17/15
12. Software Project Management	Week of 11/24/15
Exam 3	12/1/15

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	25%	25%
Exam 2	25%	25%
Exam 3	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):

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Any student requesting academic accommodations based on a disability is required to register with Disability Services each semester. A letter of verification for approved accommodations can be obtained from this office. Please be sure the letter is delivered to me as early in the semester as possible. Grades assigned before an accommodation is requested will not be changed as accommodations are not retroactive. Disability Services is located in the Student Life Office in DAL2, Suite 200 and is open 8:30a.m. – 5:00 p.m., Monday through Friday. The phone number is (972) 338-1775.

Student Evaluation of Teaching Effectiveness Policy:

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. 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 the SETE 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).

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.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic Integrity.pdf](http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic%20Integrity.pdf) for complete provisions of this code.

Bad Weather Policy:

On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website www.unt.edu/dallas. Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy:

The University attendance policy is in effect for this course. Class attendance and participation is mandatory because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent. Successfully completing this class is a function of many factors. Two such factors are class attendance and assignment completion.

Diversity/Tolerance Policy:

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 Conduct will be referred to the Office of Student Life as the instructor deems appropriate.

Cell Phones:

Cell Phone use (or ringing) in class is strictly prohibited.