Course Information

CE/CS/SE 3354.006 Software Engineering Fall 2020 Mon/Wed 5:30pm - 6:45pm Meetings: Online Only via eLearning

This class will be taught as a Remote class: synchronous online learning at the day and time of the class. The instructor delivers the instruction from home or the office. Students complete the course at a distance. Lectures will be recorded and available using Blackboard-Collaborate/Microsoft-Teams. Please note that Microsoft Teams supports closed captioning and each student can add captions to recorded lectures.

Professor Contact Information

Dr. Ebenezer Oladimeji Office: TBD (Not in office during pandemic) Phone: (972) 883-4523 (Not in office during pandemic) e-mail: ebenezer.oladimeji@utdallas.edu Office hours: No face-to-face office hours. Please send questions via email, ask questions at the beginning of class, or schedule an appointment to talk online.

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

CE/CS/TE 2336 (Computer Science II) with a grade of C or better or CS 3333 (Data Structures)
CE/CS/TE 2305 (Discrete Mathematics for Computing I) with a grade of C or better Pre- or co-requisite: ECS 3390 (Professional and Technical Communication)

Course Description

Introduction to software life cycle models. Software requirements engineering, formal specification and validation. Techniques for software design and testing. Cost estimation models. Issues in software quality assurance and software maintenance.

Student Learning Objectives/Outcomes

- 1. Ability to understand software lifecycle development models.
- 2. Ability to understand and apply software requirements engineering techniques.
- 3. Ability to understand and apply software design principles.
- 4. Ability to understand and apply software testing techniques.
- 5. Ability to understand the use of metrics in software engineering.

- 6. Ability to understand formal methods in software development.
- 7. Ability to establish and participate in an ethical software development team.
- 8. Ability to use software project management tools and techniques.
- 9. Ability to use CASE tools for software development.

Required Textbooks and Materials

• Ian Sommerville, "Software Engineering", 10th ed., Pearson, 2015, ISBN: 978-0133943030.

Suggested Texts and Reading Materials

- Stephen R. Schach, <u>Object-Oriented and Classical Software Engineering, Eighth</u> <u>Edition</u>, McGraw-Hill Publishing, 2011.
- R. S. Pressman, B. Maxim, Software Engineering: A Practitioner's Approach 8th Edition, McGraw-Hill, ISBN: 978-0078022128.
- S. Schach, "Object-Oriented and Classical Software Engineering", 8th ed., McGraw-Hill, ISBN: 978-0073376189.
- Kung D., "Object-Oriented Software Engineering: An Agile Unified Methodology", 1st ed., McGraw Hill, ISBN: 978-0073376257.
- C. Larman, "Applying UML and Patterns", 3rd ed., Prentice Hall, ISBN: 978-0131489066.
- G. Booch, J. Rumbaugh, I. Jacobson, "The Unified Modeling Language User Guide", 2nd ed., ISBN: 078-5342267976.
- S. Martin, K. Fowler, "UML Distilled: Applying the Standard Object Modeling Language", 3rd ed., Addison Wesley, ISBN: 978-0201325638.
- http://www.ibm.com/developerworks/rational/library/769.html
- http://publib.boulder.ibm.com/infocenter/rsdp/v1r0m0/topic/com.ibm.help.download. rhapsody.doc/pdf75/tutorialj.pdf

Due Date	
Mon 17-Aug-2020	Class Begins
Tue 1-Sept-2020	Census Day (Last Day to Drop, else 'W' grade)
Mon 7-Sept-2020	Labor Day – No Class
Wed 30-Sept-2020	Midterm Exam
Wed 25-Nov-2020	Last Day of Class
24-29 Nov 2020	Thanksgiving Holiday
2-8 Dec 2020	Final Exam

Tentative Course Calendar/Important Dates

Changes to these tentative dates will be announced via eLearning.

Grading Policy

Quizzes/Hom Team Project Midterm Exan Final Exam	20% 20% 30% 30%	
<u>Grading Curv</u> 97-100 93-97 90-93	<u>e</u> A+ A A-	
87-90 83-87 80-83	B+ B B-	
77-80 73-77 70-73	C+ C C-	
65-70 under 65	D F	

The instructor reserves the right to lower the average required to receive a particular letter grade.

Course & Instructor Policies

- 1. Make-up exams will be granted only for exceptional conditions, as approved by the instructor.
- 2. There will be no extra credit work.
- 3. Assignments will not be accepted late unless there are extraordinary circumstances.
- 4. Assignments should include the class, your (team) name, and the title of the assignment. -5% for each that is missing.
- 5. File names of softcopy assignments should include the class, the assignment, and your (team) name, e.g., se3354hw01jdoe.doc. -5% for each that is missing.
- 6. If a member of a project team is not contributing to the team's work, the team may notify me in writing as to the circumstances. The student will be given a chance to participate; at the end of that period if there is no improvement, the student will be removed from the team and given a zero (0) for the project.
- 7. Assignments should be submitted through eLearning ONLY.
- 8. Include your name, course, and section information either in the subject or the body of emails.
- 9. You are expected to attend class online at the scheduled class times. However, if for any reason you are unable to attend the class real-time, you will be able to asynchronously listen to the video recording of the class session.

Academic Integrity

The University of Texas System Policy on Academic Honesty appears in the Regents Rules and Regulations, Part One, Chapter VI, Section 3, Paragraph 3.22. *Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another, any act designed to give unfair advantage to a student, or the attempt to commit such acts. The minimum penalty for academic dishonesty is a failing grade (zero) for the project or examination. Do your own work on all projects and exams. DO NOT let anyone copy your work!*

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to http://go.utdallas.edu/syllabus-policies for these policies.

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