Course Syllabus

Course Information

CE/CS/SE 3354.5U1 Software Engineering Fall 2016 Tuesday/Thursday 5:30-6:45 JSOM 2.103

Professor Contact Information

Dr. Mark C. Paulk Office: ECSS 3.610 Phone: (972) 883-4839

e-mail: Mark.Paulk@utdallas.edu

Office hours: Tuesday/Thursday 2:45-3:45 or by appointment

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

CE/CS 2336 (Computer Science II)

CS 3333 (Data Structures)

CE/TE 3307 or CS 2305 (Discrete Mathematics for Computing I)

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.

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Recommended Textbooks and Materials

• I. Sommerville, Software Engineering, Tenth Edition, 2016. Parts 1 and 4.

Suggested Course Materials

- D.C. Kung, <u>Object-Oriented Software Engineering: An Agile Unified Methodology</u>, 2014.
- C. Larman, Applying UML and Patterns, Third Edition, 2005.
- R.C. Martin, Agile Software Development: Principles, Patterns, and Practices, 2002.
- S.R. Schach, <u>Object-Oriented and Classical Software Engineering</u>, <u>Eighth Edition</u>, 2011.

Assignments & Academic Calendar

Mon, Aug 22 Classes begin

Mon, Sept 5 Labor Day (no classes)

Tue, Oct 11 Exam #1

Nov 21-25 Fall (Thanksgiving) Break (no classes)

Tue, Dec 6 Last day of class – Exam #2

Dec 9-15 Finals

Grading Policy

Quizzes 10%

Assignments 30% (individual and project team)

Exam #1 30% Exam #2 30%

Grading Curve

97-100	A+
93-97	A
90-93	A-
87-90	B+
83-87	В
80-83	В-
77 00	a .
77-80	C+
73-77	C
70-73	C-
65-70	D-
under 65	F

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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 extenuating circumstances.
- 4. Assignments should include the class, the assignment, and your name.
- 5. File names of softcopy assignments should include the class, the assignment, and your (team) name, e.g., se3354a01jdoe.doc or se3354p01team01.
- 6. If you send email to the teacher or the TA, include which class you are discussing in the email.
- 7. The lowest homework grade will be dropped.
- 8. The lowest quiz grade will be dropped.
- 9. Assignments should be submitted through eLearning, but will also be accepted as hardcopy hand-ins.
- 10. You are expected to attend class.
- 11. Cell phones shall not be used in the classroom during sessions. Place them on mute. If you receive a call, leave the room.
- 12. Exams are closed book; no laptops; a one-page (front and back) set of notes may be used.

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.

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