Course Syllabus

Course Information
SE 4367.001 Software Testing, Verification, Validation, and Quality Assurance
Fall 2016
Mon/Wed 10:00-12:45
ECSN 2.126

Professor Contact Information
Dr. Mark C. Paulk
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Office hours: Tuesday/Thursday 2:45-3:45 or by appointment

Course Pre-requisites, Co-requisites, and/or Other Restrictions
SE 3306 (Mathematical Foundations of Software Engineering)
CE/CS/SE 3354 (Software Engineering)

Course Description
Methods for evaluating software for correctness and reliability, including code
    inspections, program proofs and testing methodologies.
Formal and informal proofs of correctness.
Code inspections and their role in software verification.
Unit and system testing techniques, testing tools and limitations of testing.
Statistical testing, reliability models.

Student Learning Objectives/Outcomes
1) Ability to understand the goals and different types of software testing
2) Ability to understand and apply functional testing
3) Ability to understand and apply structural testing
4) Ability to understand and apply GUI testing
5) Ability to understand and apply software testing tools

Required Textbooks and Materials
* A.P. Mathur, Foundations of Software Testing, 2nd Edition, 2013.

Suggested Course Materials
- D.G. Firesmith, Common System and Software Testing Pitfalls, 2014.
- C. Kaner, J. Falk, and H.Q. Nguyen, Testing Computer Software, Second Edition, 1999.
- C. Kaner, J. Bach, and B. Pettichord, Lessons Learned in Software Testing, 2001.
- G.J. Myers, T. Badgett, T.M. Thomas, and C. Sandler, The Art of Software Testing, Second Edition, 2004.
- R.A. Radice, High Quality Low Cost Software Inspections, 2002.
- G.M. Weinberg, Perfect Software and Other Illusions About Testing, 2008.

Assignments & Academic Calendar

Mon, Aug 22	Classes begin
Mon, Sept 5	Labor Day (no classes)
Wed, Sept 28	Exam #1
Wed, Nov 2	Exam #2
Nov 21-25	Fall (Thanksgiving) Break (no classes)
Wed, Dec 7	Last day of class – Exam #3
Dec 9-15	Finals

Grading Policy

Quizzes	10%
Homework	30%
Exam #1	20%
Exam #2	20%
Exam #3	20%

Grading Curve

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

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 name, e.g., se4367hw01jdoe.doc.
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. If you are expecting an emergency you may place them on silent. 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.