# Course Syllabus

#### **Course Information**

CE/CS/SE 3354.003 Software Engineering

Fall 2015

Tue/Thur 11:30am-12:45pm

ECSS 2.305

#### **Professor Contact Information**

Dr. Lingming Zhang Tel: (972) 883- 3573

Email: Lingming.zhang@utdallas.edu

Office: ECSS 4.205

Office hours: Tue/Thur 2:00pm-3:00pm

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

CE 2336 or CS 2336 or TE 2336 with a grade of C or better or CS 3333 CE 2305 or CS 2305 or TE 2305 with a grade of C or better or equivalent

Prerequisite or Corequisite: ECS 3390

# **Course Description**

Introduction to software life cycle models

Software requirements engineering, formal specification and validation

Software architecture and design

Advanced techniques for software testing

Formal methods in software engineering

#### **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 and modeling
- 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 understand software project management
- 9) Ability to understand CASE tools for software development

# **Required Textbooks and Materials**

NONE

#### **Suggested Course Materials**

Ian Sommerville, "Software Engineering", 9th Edition, Addison-Wesley, 2011. (Or 8th Edition, Or 7th Edition)

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Pressman, "Software Engineering: A Practitioner's approach", 7th Edition, McGraw Hill, 2010. (Or 6th Edition, Or 8th Edition)

Pfleeger and Atlee, "Software Engineering: Theory and Practice", 4th Edition, 2010, Prentice Hall, 2006.

# Assignments & Academic Calendar

Thursday, Sept 24: Exam #1 Thursday, Oct 29: Exam #2 Nov 23-28 Holidays (no class)

Dec 8: Exam #3 (final) will be this day or during the final exam period

### **Grading Policy**

Homework and quizzes: 20%

Project: 30% Exam #1 10% Exam #2 10% Exam #3 20%

Course participation: 10%

#### **Course & Instructor Policies**

- 1. Make-up exams will be granted only for exceptional conditions.
- 2. Extra credit work will be available as informed by the instructor.
- 3. All assignments are due by the beginning of class on the day due.
- 4. Assignments will not be accepted late unless there are extraordinary circumstances.
- 5. Assignments should include your (team) name, your utd id, and the title of the assignment. The assignments missing identity may not get credit.
- 6. Assignments should be submitted through eLearning, but may also be accepted as hardcopy hand-ins.
- 7. You are expected to attend class.
- 8. 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.

#### **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 <a href="http://go.utdallas.edu/syllabus-policies">http://go.utdallas.edu/syllabus-policies</a> 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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