Course Syllabus

Course Information
CE/CS/SE 6329
Object-Oriented Software Engineering
Fall 2016
Tue/Thur 1pm-2:15pm
FN 2.106

Professor Contact Information
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Office hours: Tue 12:00-1:00pm

Course Pre-requisites, Co-requisites, and/or Other Restrictions
Prerequisites: CS 3354 or (CE 5354 or CS 5354 or SE 5354)
and knowledge of Java. (3-0) S

Course Descriptions
Concepts, methods and techniques necessary to efficiently capture software requirements in use cases and transform them into design and implementation. Use of UML in the context of an iterative, agile process with an OO model transformation approach. Use of advanced tools that allow the synchronization between the various models and the code.

Course Topics
Software life cycle models
Software requirements engineering,
Formal specification and validation
Software architecture and design patterns
Software evolution
Techniques for software maintenance
Techniques for software testing
Techniques for software detection and prediction

Student Learning Objectives/Outcomes
1. Ability to understand software lifecycle development models
2. Ability to understand and apply software design principles and modeling
3. Ability to understand and apply software design patterns
4. Ability to understand and apply software maintenance techniques
5. Ability to establish and participate in an ethical software development team
6. Ability to understand project management
7. Ability to understand and use advanced 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)
Object-Oriented and Classical Software Engineering, by Stephen R. Schach, McGraw-Hill, New York, 2007.
Pressman, "Software Engineering: A Practitioner's approach", 7th Edition, McGraw Hill, 2010. (Or 6th Edition, Or 8th Edition)

Assignments & Academic Calendar
Nov 21-25 Holidays (no class)
Final project is due during the final exam period

Grading Policy
Homework: 6 assignments (45%)
Projects: 3-4 projects (45%)

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 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.