CS 5103 Software Engineering
Fall 2015

Course Instructor

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Office Hours:
Tuesdays 3:00pm to 4:30pm
Thursdays 3:00pm to 4:30pm

Course Information

Class Time: TR 6:00pm to 7:15pm
Class Location: NPB 1.226

Course Web Site

http://xywang.100871.net/CS5103.htm

Textbooks

One of the following textbooks.
- Ian Sommerville, "Software Engineering", 7th or 8th or 9th Edition
- Pfleeger and Atlee, "Software Engineering: Theory and Practice", 4th Edition, 2010, Prentice Hall, 2006.
- Pressman, "Software Engineering: A Practitioner's approach", 6th Edition, McGraw Hill, 2005. (Or 7th Edition)

Prerequisites

Object Oriented Programming

Course Outline

This course reviews the basic concepts and knowledge of software engineering. We introduce software development process, as well as approaches and techniques supporting different software development phases, including requirement collection, design, implementation, quality assurance, and maintenance. We also discuss some recent research progress on major problems of software engineering.

Course Objectives

- To understand software process, and commonly used approaches for different phases in software process
- To learn and gain experience on developing software projects with existing tools and good software engineering practices

- To acquire some insights about current software engineering research and the software development in future

Course Topics

- Software Development Process
- Requirement and Specification
- Unified Modeling Languages (UML)
- Design Patterns and Refactoring
- Testing and Software Verification
- Software Maintenance and Evolution
- Recent Research Progress

Grading Scheme

Mid-Term Exams: 20% * 2
Assignments: 20% (Assignment 1: 10%, Assignment 2: 10%)
Course participation and presentation: 10%
Projects: 30%

Students with Disabilities

The course will follow all relevant and appropriate university regulations including those relevant to students with disabilities. Any students requiring additional assistance due to disabilities should contact the professor during the first week of the semester.

Course Evaluation

The feedback collected from course evaluation process helps teachers to improve the course and their teaching skills. Please participate in course evaluations after the 13th week of the semester.

This Syllabus is provided for informational purposes regarding the anticipated course content and schedule of this course. It is based upon the most recent information available on the date of its issuance and is as accurate and complete as possible. I reserve the right to make any changes I deem necessary and/or appropriate. I will make my best efforts to communicate any changes in the syllabus in a timely manner. Students are responsible for being aware of these changes.
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