

SCE 430 Software Engineering (F091)

Winter 2020

Department of Software and Computer Engineering

Ajou University

Pre-requisite:

Students should have:

-familiarity with the commonly used software analysis and design methodologies, including structured analysis and design and the object oriented techniques;

- basic programming skills and general familiarity with the processes involved in the development of software using languages like Java and C/C++)

Topics include :

This course introduces to the student the basic concepts, principles, and dynamics of software engineering. It involves the study of methodologies and technologies, and the construction of models at each major software development phase, namely, Requirements and Analysis, Design, Implementation, and Testing. It also discusses the methodologies and technologies of software quality assurance and change management. There is a project assignment in this course to enhance the practical skill of software engineering.

Instructor & TA:

Prof. Seok-Won Lee Tel: 031-219-3548 Email: leesw @ ajou.ac.kr (insert 'SCE430' in the subject) Office: Pal-Dal Hall #603 Office Hours: by appointment

TA: Sangeet a Dey privatitli@gmail.com Pal-Dal Hall 913-1, 031-219-2442

Meeting Time & Location:

Mondays & Thursdays, (D) 1:30-2:45 PM, Pal-Dal Hall 407

It will be fully on-line.

Specific Course Objectives, Topics¹ and Schedule²:

Objectives:

Students will learn about many aspects of working with a team on the projects to produce quality software products on time and within budget. The student will gain an appreciation of the tools and techniques used to develop software systems within a group context. Topics to be studied include: - life cycle models,

- functional specification and design of real-time systems,

- testing strategies and quality management

Accomplishments:

By completing this course, the students will be able to:

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1) apply techniques for control of software project

2) construct and validate a software specifications and products

3) functional design of software systems

4) describe software systems using appropriate language and technical specification techniques to suit the intended audience

¹Additional topics will be introduced as time allows. ²Schedules may be changed.

Important Dates:

Mid-term: TBD. (during class hours) Final exam: TBD (during class hours)

Text Book (Required):



lan Sommerville, Software Engineering, 10th Edition 2016

Text Book (Optional):



Roger Pressman, Software Engineering A Practitioner's Approach 7th Ed. 2010

Grading Policies (Subject to Change)

Midterm: 30% Final Exam: 30% Project Proposal Report/ Presentation/ Demonstration: 30% Attendance & Participation: 10%

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Honor Code: See below.

Special Notes:

- 1. <u>Academic dishonesty</u>, in any form, will not be tolerated. Cheating, copying parts or whole papers/programs, or complicity in any violations of the student academic integrity code will result in prompt action on my part in accordance with the procedures outlined in the Ajou Univ. Code of Student Academic Integrity. See a more detailed statement at the end of this syllabus.
- 2. You are responsible for <u>class absences</u>. Attendance is mandatory for all class meetings. Three to four unexcused absences results in the loss of a letter grade; more than four unexcused absences will result in the automatic failure of the course.
- 3. Please let instructor know the need, when feasible, to flexibly accommodate student observances of the holy days of all religious denominations.
- 4. Late policy: Any assignments should be submitted BEFORE the class on the due dates. In case of late submission due to unavoidable circumstances, students should obtain permission from the instructor ahead of the deadline. Late submissions will result in a 10% penalty per day.
- 5. No early or make-up exams. No exceptions.
- 6. The standards and requirements set forth in this syllabus may be modified at any time by the course instructor. Notice of such changes will be by announcement in class [or by written or email notice][or by changes to this syllabus posted on the course website
- 7. Class participation: Students are encouraged to ask questions in class. The questions should be relevant to the course topics. Also initiating or engaging discussions in class that help further understanding of course materials or topics are all welcome and encouraged. All cases will be used in the evaluation.
- 8. In the event of inclement weather, call the Univ. office for closings or delays.
- 9. Inappropriate conduct will result in your being dismissed from class; that class will count as an unexcused absence; that misconduct will be reported to the department. Inappropriate conduct includes, but is not limited to, disrespectful or vulgar language, disruptive conduct (such as talking during a lecture, unnecessary comments that add no value to the class), sleeping in class, and any activities that negatively impacts the ability of other students to learn and/or listen in class. If you exhibit this behavior, you will be asked to leave the class, and that class will count as an unexcused absence. Repeated inappropriate behavior may result in a student's being dismissed from the course, with a potential reduction in grade, including a potential grade of "F" in the course. All electronic equipment, including cellular phones and beepers, must be turned OFF during class. A student whose phone or beeper goes off in class will be banished from class for the remaining class time, and that class will count as an unexcused absence. Students are permitted to use computers during class for note-taking and other class-related work only. Those using computers during class for work not related to that class must leave the classroom for the remainder of the class period.

Academic Integrity: Refer to the University document.