

Tentative Syllabus

CS 308: Software Engineering

Fall 2024

Lecture Hours: Mondays 11:40 – 12:30 (Cinema Hall)
Fridays 08:40 – 10:30 (Cinema Hall)
Lab Hours : Tuesdays 17:40 – 19:30 (Cinema Hall)

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Software Engineering: 1) the application of a systematic, disciplined, quantifiable approach to the development, operation, and maintenance of software; that is, the application of engineering to software. (2) The study of approaches as in (1) ”
IEEE Standard Glossary of Software Engineering Terminology, 1990

DESCRIPTION

This course is an introductory level course to the fundamentals of software engineering. One focus of this course is to provide software engineering knowledge and skills that students can put into immediate practical use. Topics covered include requirements engineering, architecting and designing software systems, quality assurance, managing software process, and getting familiar with the state-of-the-art software development tools.

TENTATIVE PROGRAM

- week 1** Introduction to Software and Software Engineering
- week 2** Managing the Software Process
- week 3** Scrum
- week 4** Requirements Engineering
- week 5** Modeling with Classes I
- week 6** Modelling with Classes II
- week 7** Modeling Interactions and Behavior
- week 8** Software Design Patterns II
- week 9** Software Design Patterns III
- week 10** Software Design Patterns I
- week 11** Software Architecture
- week 12** Software Verification and Validation I
- week 13** Software Verification and Validation II

GRADING POLICY

	contribution (%)
Short Quizzes	10
Midterm	20
Final	20
Project	50

No makeups for the short quizzes! The average of the best $n-2$ quiz grades will be used as the final quiz grade, where n is the total number of quizzes.

Be aware that, since the term project is an integral part of the course, getting good grades in the exams and quizzes is not sufficient to pass the course! To be assessed as successful, students must significantly contribute to their project group's success.

COURSE PROJECT

Each project will be carried out by using Scrum in a team.

TURN-IN and LATENESS POLICY

All the deadlines are sharp deadlines!

COLLABORATION POLICY

Project groups may discuss ideas about their projects with other groups, but they should not share any project artifacts with others (e.g., requirement documents, design documents, source code, etc.) Each group is responsible in making sure that their artifacts are well protected from others.

MAKE-UP POLICY

It's simple. Do NOT miss an exam!

If you do miss an exam, no makeup exams will be granted unless you have a documented emergency situation and notify the instructor within 48 hours after the exam date.

TEXTBOOK

There is no textbook for this course. The following, however, is a list of suggested books:

- *Object Oriented Software Engineering: Practical Software Development using UML and Java*, Timothy C. Lethbridge and Robert Laganier, McGraw Hill, ISBN 0-07-710908-2
- *Software Engineering*, Ian Sommerville, Pearson, ISBN 0-13-394303-8
- *The Mythical Man-Month*, Frederick P. Brooks, ISBN 0-201-83585-9
- *Design Patterns*, Eric Gamma et. al., Pearson, ISBN 0-201-63361-2
- *Scrum: A Breathhtakingly Brief and Agile Introduction*, C. Sims and H. L. Johnson, Dymaxicon, ISBN 978-1-937965-04-4
- *Code Complete*, Steve McConnell, Microsoft Press, ISBN 9780735619678

OTHER POLICIES

- For the instructor's office hours, send an email to the instructor, indicating a couple available time slots within in the office hours, so that the meeting is scheduled beforehand.