Tentative Syllabus

CS 308: Software Engineering

Fall 2020

Lecture Hours  Mondays  15:40 – 17:30
Lecture Hours  Tuesdays  15:40 – 16:30
Lab Hours  Thursdays  08:40 – 11:30

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Office: TBD
Office Hours: Mondays 17.30 – 18.30 (tentative)

TAs  TBD

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)”

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  Agile SW Development: 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 I
week 9  Software Design Patterns II
week 10  Software Design Patterns III
week 11  Software Architecture
week 12  Software Verification and Validation I
week 13  Software Verification and Validation II
week 14  Advanced Topics
GRADING POLICY

<table>
<thead>
<tr>
<th></th>
<th>Contribution (%)</th>
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<tbody>
<tr>
<td>Short Quizzes</td>
<td>10</td>
</tr>
<tr>
<td>Midterm</td>
<td>20</td>
</tr>
<tr>
<td>Final</td>
<td>20</td>
</tr>
<tr>
<td>Project</td>
<td>50</td>
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All the Short Quizzes will have the same weight.

As the midterm grade, 4 of the best Long Quizzes (each with equal weight) will be used.

The final project demos must be made before the last day of classes.

The date and time of the final exam will be announced by Student Resources.

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 in a group of 6 (or more) students. Several suggested project topics will be announced in the class. Students are welcome to propose their own project topics, each of which will be carefully examined, and honored if found to be challenging and appropriate for the course. The projects will be carries out using Scrum.

TURN-IN and LATENESS POLICY

Assignments (e.g., project phases) may be turned in up to 24 hours late with 15% penalty, or 24 to 48 hours late with 35% penalty. No assignments will be accepted more than 48 hours late for any reason!

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


RECOMMENDED BOOKS

- Design Patterns, Eric Gamma et. al., ISBN 0-201-63361-2