Software Engineering (CSE 435)

Instructor: Dr. Marilyn Wulfekuhler  wulfekuh@cse.msu.edu
            Office Hours: time and place to be determined

TA: Dennis Phillips denisp@msu.edu
       Office Hours: Tuesday, 10:00 - 12:00 in 3202 Engineering Building or by appointment

Class: M, W  10:20 - 11:40,  2205 Engineering Building

Midterm Exam: Wednesday, Oct 21, 2015  in class
Final Exam: Wednesday, Dec 16, 2015  12:45 - 2:45


Tentative Course Evaluation:

<table>
<thead>
<tr>
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<th>Percentage</th>
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<tbody>
<tr>
<td>Homework, in class activities, and “lab” assignments</td>
<td>25</td>
</tr>
<tr>
<td>Project (with several deliverables)</td>
<td>35</td>
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<tr>
<td>Exams (midterm and final)</td>
<td>40</td>
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Course Objectives:

This course is designed to present students with an overview of Software Engineering. Students will be exposed to and apply current technology used to develop software. Both the theoretical and practical aspects of software engineering will be presented and applied in the course. Students will apply software engineering techniques to homework assignments and software project elements throughout the course. Students will have opportunities to develop and/or improve their technical writing and software development skills during the course of the term, with particular emphasis placed on analysis and design.

Topics to be covered include:

- Software Process and Project Planning
- Requirements Engineering
- Design Strategies
- Informal and formal specification and analysis techniques
- model driven development
- testing techniques
- software product lines
- prototyping
- oral presentation
- software maintenance

**Requirements:** CSE 335 or its equivalent is a pre-requisite. Students should be familiar with at least two higher level programming languages, the basic concepts of computer organization and operating systems, and basic formal concepts of machines and languages, algorithms and data structures, discrete structures, design patterns, and object-oriented design.

**Integrity and Ethics:** Don’t cheat.

**Disruptive Behavior:** Don’t bother anyone else or interfere with their learning experience

**Examinations:** Two exams will be given. The exams will contain questions covering material from the text, required reading, homework (including in class exercises), project assignments, and the lectures. Scores of less than 60% can be considered to be failing.

**Make-up Exams:** No make-up exams will be given except for documented illness or personal emergency. To be eligible for a make-up, you must notify the instructor or the department office prior to the time of the exam and provide documentation for the situation when arranging the make-up. A student not taking an exam will receive a grade of 0.

**Project:** Not turning in one of the project deliverables on the due date may result in the student receiving a 0 for the project component of their respective grades. After each deliverable, each team member will be completing peer review forms to assess the contributions of each team member, including self-assessment.

**Homework/In class assignments/Labs:** All assignments (homework and project related assignments) are due at the BEGINNING of class unless otherwise noted by the instructor. Late work is not accepted without prior approval.