**SWE 7903 SOFTWARE ENGINEERING CAPSTONE**

**Spring 2012**

**Professor**

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Office Hours: 3:00 – 6:00pm & 6:30 – 7:30 pm Monday & Wednesday, and ONLINE 1:00-3:00 pm Tuesdays (in GA View/Vista 8)
other times by appointment

Class Info: Mon/Wed 7:30-8:45pm and Online

**Course Content:**

**Prerequisite: Satisfactory completion of SWE Core courses**

This course is designed for students to give a professional focus to their degree. The students work in designated teams under the supervision of the course instructor (a CSE faculty member), on a project of practical significance in software engineering. Each of the teams will deliver a final working product, generate a substantial final report, and give a final presentation on the project.

**Course Objectives (matches SWE Program Outcome Mapping):**

1. Be able to apply advanced mathematics and science to the engineering of software systems.
2. Demonstrate knowledge of software processes, software architecture or models, and the mapping of underlying techniques into the problem domain.
3. Demonstrate the ability to analyze, assess, verify and validate, evaluate artifacts of software engineering systems.
4. Contribute to teams in the design, implementation, management and evolution of software systems
5. Demonstrate effective technical oral and written communication skills as expected in the discipline

**Textbook: None**

**Grade:**

The course grade will be based on the following parameters:

1. Individual participation as assessed by a) the instructor and b) by the team members throughout the course in and outside of the classroom and team evaluation report.
2. Sum of milestone grades from a) project proposal, b) project plan, c) project documentation, d) project implementation, e) final report and presentation (*partially judged by how much of the course objectives are met*)
3. \*\*\*\* Note that “participation” includes a) pro-active class participation, b) your contributions, c) your efforts, d) your weekly status report presentations, e) your team spirit, and f) fulfilling your commitments to the project and to your fellow team members. \*\*\*\*

**\*\*\* Important Policies\*\*\*\***

All work submitted for credit is expected to be the work of the individual student. Collaboration (except on the group project) will be treated as cheating. If you are found to be violating the rules of academic honesty, the LEAST that will happen is that you will receive a zero. Harsher penalties may include failure of the course and dismissal from school. DO NOT CHEAT! Additionally:

* No make up work except for emergencies with proof( e.g. doctor’s slip)
* Any cheating will result in failing grade and possible disciplinary actions

(Please read the University and School policy on Academic Integrity – on the CSE School website))

* No “extra credit” work will be given to improve one’s grade
* Students with disability should contact Disability Services Counselors
* Copies of your class work (and test, if applicable) will be kept for records

# **Project:**

This course consists entirely of a major project. The project is a group project that covers the entire development life-cycle. The actual documentation your team provides is left up to each team to decide. A list of suggested/typical documentation includes the following:

1. 1. System Proposal
2. 2. System Plan

2. Software Requirement Specification (including a Preliminary User's Manual)

 3. Test Specification Document

4. Test Reporting Document

5. User's Manual

6. System Design

1. 7. Final Report including Project Metrics
2. 8. Source Code

The project also includes the demonstration of the final system.