**CMPS 4910**

**Senior Project I**

**Instructor:** Dr. Chengwei Lei

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**Course description:** After consultation with the faculty supervisor and investigation of relevant literature, the student(s) shall prepare a substantial project with significance in the designated area. The timeline, teamwork responsibilities, milestones, and presentation(s) will be scheduled. **Prerequisites: At least 12 semester units of 3000- or 4000-level CMPS courses.**

**Text:** No textbook is required for the class.

**Final:** *There is no final exam for this class. Your end of term presentation and project progress report takes the place of the final exam.*

**Teamwork and Participation**

This portion of your grade will be based on your attendance on weeks when your team is NOT presenting, on your completion of a teamwork evaluation form, and on your participation in the team.

**Code Diaries**

Every student should maintain a code diary while working on their portion of the project. This diary should contain the highlights of the research, coding, and troubleshooting done during the term, but does not need to go into deep detail.

**Presentations**

Students will be expected to give regular oral presentations to the class throughout the term. Students will be graded individually based on their part of the team presentation. A presentation rubric will be posted on Blackboard.

**Semester Grade**

|  |  |  |
| --- | --- | --- |
| Project Proposal | 25%  | (team report) |
| Presentations | 40%  | (based on individual presentations, and code diaries) |
| Project Progress Report | 30%  | (20% team report, 10% for individual) |
| Teamwork and Participation | 5% |  |

**Student Learning Outcomes**

CMPS 4910 is the first part of two-term senior programming project sequence, and will complete the problem analysis and project design part; emphasizing problem analysis and applying the knowledge of computer science areas to design solutions. In this course, students will do the following:

* Work as teams on a team-chosen design problem, which will result in a substantial software project at the end of the two-course sequence.
* Choose a problem, analyze the problem, apply knowledge of computer science areas, and propose a solution to the problem.
* Analyze the possible solutions and discuss the solutions with class.
* Present the finalized solutions to the class.
* Plan the project implementation, including the timeline, individual responsibilities, and milestones of the project.
* Begin implementation of the project. Teams work on their projects and discuss their projects with the faculty supervisor and class.
* Meet regularly outside of class with their team to work on their project.
* Present their implementation difficulties/problems, solutions, and experiences to the class, and listen for suggestions from others in the class.

Specific requirements for this course are:

* Orally present to the class at least 3 times. Each team will be assigned a regular presentation time regularly throughout the term. Every member of the team is expected to present during these times.
* Write a project proposal that describes the problem, describes the team's analysis of the problem, analyzes possible solutions, justifies the team's chosen solution, and plans for the project implementation over both terms of the course.
* Write a project progress report at the end of the term that states what the team has done to date, describes any changes the team has made to the project implementation plan, and contains a code diary section written individually by each team member.

At the end of the two-term sequence, students will present the final project implementation to the class, submit a final written report, and complete evaluations of team members.

 **Semester Mark**

|  |  |
| --- | --- |
| **Semester Grade**  | **Semester Mark**  |
| 90 – 100  | A  |
| 80 – 89  | B  |
| 70 – 79  | C  |
| 60 – 69  | D  |
| 0 - 59  | F  |