Syllabus for COMP 492, Spring Senior Seminar in Computer Science Spring 2011 Dickinson College Instructor: John MacCormick

Goals

- Understand the fundamental ethical, legal and social implications of computing
- Become prepared for graduate study or a professional career in computing
- Understand some elements of software engineering
- Improve technical writing skills and oral presentation skills
- Attain a broader vision of the discipline of computer science

Teaching methods

- Substantial year-long research or implementation project, including multiple written and oral status reports
- Required readings
- Class discussions of required readings, some led by students
- Programming labs to reinforce software engineering concepts

When and where

- Classes: Tuesday 3:00–5:00pm, Tome 232
- Office hours: see the instructor's webpage

Book

Ethics for the Information Age (4th Edition) by Michael J. Quinn, 2010 Publisher: Addison Wesley ISBN: 0132133873

Assessment and grading

• Final grade for the Spring semester will comprise:

| | weight | due date |
|--------------------------------|--------|----------------|
| A0: Leading a discussion | 20% | various |
| A1: Cloud computing lab | 5% | 2/1 |
| A2: Design pattern lab | 5% | 2/15 |
| A3: Project update | 5% | 3/1 |
| A4: Report draft | 20% | 3/29 |
| A5: Science symposium poster | 10% | 4/25 |
| A6: Final project presentation | | 5/11 or thesis |
| | 15% | defense date |
| A7: Final project report | 20% | 5/17 |

Notes: 1. Attendance at, and participation in, discussion classes is essential for the success of this seminar. The instructor prefers to rely on the maturity and dedication of students for this. However, if attendance or participation falls below expectations, a participation grade for discussion classes will be introduced. If this proves necessary, a detailed explanation of participation grades will be provided.
2. This course requires attendance at the following two events: Dickinson Science Symposium, Monday 4/25, 4:30pm; and Computer Science Senior Symposium, Wednesday 5/11, 2:30pm.

- Assignments: Assignments A0-A7 will be described in more detail on the course webpages. All assignments are due at the start of class on the due date, or at the end of the exam slot, or otherwise as described in the assignment instructions. Assignments should be submitted electronically to Moodle unless otherwise specified in the assignment instructions.
- Senior project: All students will continue and complete the year-long Senior Project begun in the Fall Senior Seminar. The majority of graded assignments represent milestones in the senior project.

Amount of work

College policy recommends approximately 3 hours of independent work for every hour of class time. Our class meets for only 2 hours per week, but it is a seminar-style class with a substantial project attached. Thus, the 3-hour multiplier does not provide a realistic estimate for this class; using a 4-hour multiplier is more appropriate. Therefore, you should expect to spend 7-9 hours per week (outside of class time) on this course.

Plagiarism, copying, and collaborating

The College's standard policy on plagiarism and academic integrity applies; you should be familiar with it (please see the "Community Standards" document available from the college website). Be especially careful to apply the same standards of academic integrity to computer code as you would to written work. Always give a full, clear attribution to code copied from any source whatsoever. In the senior project, it is permissible to copy code from appropriate sources in the same way that a professional software developer might do so, provided of course that the source is clearly acknowledged. In lab projects, code may not be copied from any source unless expressly authorized in the instructions for the lab.

Accommodations

The instructor will follow college policy on accommodations for students who need them.

Late Work Policy

Each student is permitted a total of four no-penalty days of lateness over the entire semester; every subsequent day of lateness incurs up to a 25% penalty for the late assignment. Late days can be used only in whole day units. Late days cannot be used for presentations. Accounting for late days is mostly via an honor system: students should keep count of their late day usage. To use one or more late days on a given assignment, state clearly at the start of your submission how many days you are using, and the total used so far in the semester.