Syllabus for COMP 492, Spring Senior Seminar in Computer Science

Spring 2016
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 written and oral status reports
- Required readings
- Class discussions of required readings, some led by students
- Programming lab(s) to reinforce software engineering concepts

When and where

Classes: Tuesday 3:00–5:00pm, Tome 231Office hours: see the instructor's webpage

Book

Ethics for the Information Age (4th Edition suggested, other recent editions are acceptable)

by Michael J. Quinn, 2010 Publisher: Addison Wesley

ISBN: 0132133873

Assessment and grading

Final grade for the Spring semester will comprise:

	weight	due date
A1: Design pattern lab	5%	2/2
A2: Leading a discussion	20%	Topic by 2/9, reading list one week before discussion, annotated bibliography and discussion plan on day of discussion
A3: Code review	5%	3/1
A4: Report draft	15%	3/29
A5: Science symposium poster	10%	4/14
A6: Final project presentation	15%	5/11 (earlier for honors projects)
A7: Final project report	20%	5/17
Participation and preparation	10%	various

Additional events: This course requires attendance at the following two three events: Dickinson Science Symposium, Thursday 4/14, 4:30-6:00pm; and Computer Science Senior Symposium, Wednesday 5/17 5/11, 9:30am-12:00pm; Clarke Forum panel session, "iPhone vs FBI: government surveillance in the post-Snowden era", Tuesday 4/5 at 7pm in Allison (no class at 3pm on 4/5). [This change to the syllabus was made on 3/1/16.]

Assignments: Assignments A1-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 start 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.

Participation and preparation: Many of our class sessions are discussion-based. This type of class can only succeed if everyone completes assigned readings in advance, attends class, and participates in discussions. Therefore, participation, attendance, and preparation will be graded using various methods to assign "participation points." Any class may include a reading quiz worth about 5 participation points. Attendance at each class is worth 2 participation points (one absence is permitted with no penalty, but any further absences must be documented and be excused by me in advance). Note that whenever a reading is assigned, every student must bring a copy of the reading to class (either an electronic copy on a laptop or tablet, or a paper copy). Failure to do so will reduce your attendance points. Further methods for assigning participation points may be added during the semester, but these will always be explained in advance. For example, students may be required to post discussion questions to Moodle before class or answer discussion questions on Moodle after class. Another example is that contributions to discussions during class may also be used to assign participation points (but this would be clearly explained before being put into effect).

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: 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 <u>accommodations</u> 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 (24-hour) units. Late days cannot be used for presentations, discussions, or the final report (i.e. late days cannot be used for assignments A2, A3, A5, A6, A7; they can be used for A1 and A4). 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.