CSCI 440: Capstone in Computer Science

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Meetings Reserved meeting hours are MF 12:00-1:20 in Thompson 399. Most weeks we will only

meet as a class on Monday, and I will meet individually with groups on Friday. We will also meet on a Saturday in late April or early May (TBD) for final presentations.

Course Description This is it—the capstone to your major. This class will give you the chance to integrate the knowledge you've gained from across the curriculum, applying it toward a final, professional project of which you can be proud.

Students are expected to integrate the knowledge from multiple CS classes, in order to create a functional, high-quality application. You should already be assigned into groups working toward specific problems. Managing your time and working with a team successfully are important parts of this class.

Students are also required to read several important papers over the semester, in order to gain a sense of the history of computer science. Most Mondays there will be a short quiz on the week's reading, followed by a discussion of the papers in question. Most of the work here will be self-directed. You will need to keep yourself on task, even when there is no assignment immediately due. You are seniors. It is assumed that you are intelligent and motivated, and able to solve the unforeseen issues that will arise.

Class Goals The specific goals for this course include:

- To independently explore an advanced topic in computer science.
- To formally present work in both oral presentations and written reports.
- To constructively critique and discuss the work of others.
- To trace the historical development of computer science.
- To learn LATEX and other presentation tools.
- To write a full résumé ready for finding a job.

Web Page The class web page will be located at http://cs.pugetsound.edu/~aasmith/cs440/.

The schedule, readings, and other valuable info will be posted there.

You must be a senior to take this class, or have special permission from the instructor. In addition, you should have passed both CSCI 361 (Algorithms) and CSCI 240 (Software Engineering) with at least a C-. Knowledge from other upper-division courses will also help you with your project.

Course Policies Most Mondays will consist of a short closed-book quiz on the week's reading, followed

by a discussion. Your lowest quiz score will be dropped from your grade.

Every group must give two 20-30 minute presentations:

• The midterm presentation will be given the week before Spring Break. (The full class will be meeting that Friday, for this purpose.) This presentation will be on progress made so far, and tasks remaining to do.

Prerequisites

• The final presentation will be given during "Math/CS Day", which will be a Saturday in late April or early May. Your attendance is required. The public will be invited to this event.

Of course, you are expected to follow school standards with respect to academic dishonesty: follow the school's Honor Code, cite your sources, don't plagiarize, and ask the professor first if you're concerned about any gray areas. Infractions will be dealt with strictly. So long as you give credit where it is due, this shouldn't be a problem.

Grading

Final grades will be determined as follows:

Weekly	Weekly	Midterm	Final	Final
Quizzes	Check-Ins	Presentation	Presentation	Report
20%	10%	10%	20%	40%

As you can see, the majority of your grade (60%) will be determined by your project. Please work hard to make sure that it is of professional quality, that you can show off to friends, family, peers, and potential bosses. In addition, class participation during discussion might help bring up your grade, if it is borderline.

Attendance

Please let me know if you will be missing a Monday class. Depending on circumstances, I may or may not let you take the quiz for that week.

Miscellany

If there are any special holy days that you will be taking off, please let me know as soon as you can so that we can work around them.

Please consider getting a flu shot. Influenza kills, and disease can spread rapidly in the dorms. (And you really don't want to miss a week of class. Trust me.)

Finally...if there's anything else I can do to help you, please let me know. I'm willing to go out of my way to make this a valuable class for you, but I can't do that unless you talk to me.

Mandatory UPS Boilerplate Syllabus Text

In their infinite wisdom, the powers that be at UPS have decreed that this text will be included in every class syllabus. This should therefore be considered part of the main syllabus.

University, Academic, and Administrative Policies

There are many university policies and resources that offer guidance on how to be safe and make the most of your college education. Here are a few that you should take a moment to review:

- Please review university emergency preparedness, response procedures, and a training video posted at https://www.pugetsound.edu/emergency/.
- For information on communicable disease outbreak prevention, please see https://www.pugetsound.edu/emergency/communicable-disease-outbreak-prevention/.
- For information on academic and administrative policies (such as policies on grade policies, leaves of absence, declaring a major, academic integrity, and academic petitions) please refer to the academic and administrative policies section of the Bulletin.
- If you are seeking a religious accommodation in an academic course or program, please follow the process provided in the university's policy on Student Religious Accommodations in Academic Courses or Programs, available at https://www.pugetsound.edu/office-university-counsel/policies/campuswide-policies/student-religious-accommodations-academic-courses-or-programs/.
- If you have any concerns about prohibited harassment or discrimination that may be affecting you or others at Puget Sound, please contact the university's Title IX Coordinator/Equal Opportunity Officer, Wheelock 218, 253.879.3793, website: https://www.pugetsound.edu/title-ix-equal-opportunity/, email: titleix-eoo@pugetsound.edu. The Title IX Coordinator/Equal Opportunity Officer can explain available options and help address concerns informally or formally.
- If you have a physical, psychological, medical, or learning disability that may impact you as a student at Puget Sound, please contact Student Accessibility and Accommodation, Howarth 105, 253.879.3399, website: https://pugetsound.edu/saa/, email: saa@pugetsound.edu. They will determine with you what accommodations are necessary and appropriate.