1 Introduction

This class is CSE 221: Operating Systems (OS). The class meets on Tuesdays and Thursdays from 12:45pm to 2:05pm in Center 207.

2 Instructors and Office Hours

The instructor for this class is Dr. Bennet Yee. I just go by "Bennet" or "bsy". My official office hours are on Wednesdays 1:30pm to 2:30pm in my office, AP&M 5141. You should feel free to drop by at other times; if you come by outside of office hours and I'm busy, I may ask you to come back later, but I will otherwise make an effort to accomodate you. You can first make an appointment if you want to be sure that I'm available. Run the command "`finger bsy@play`" to check my idle time and see if I'm around. You may also email questions to me at `<bsy+cse221w00@cs.ucsd.edu>`.

3 Class Contents / Goals

In this class, you will learn about OS design, some history of OSes, technology trends, as well as critical thinking/analysis of OS design choices in order to prepare you to do OS research / allow you to converse intelligently at Computer Science cocktail parties. To these ends, the course is organized around reading research papers, ranging from "classics" to more recent works. We will go over 2 papers per class meeting — this is a **lot** of reading. You are required to send me by email an evaluation of the paper before class. The evaluations do not have to be long; about half a page should suffice. They should contain a short summary (what questions did the authors raised, what results did they present), what you learned, what further questions are raised, what remains unanswered, etc. Furthermore, during class, I will pose questions for individual students in the class to answer / lead mini-discussion. Occasionally you may be asked to lead the discussion. Be prepared!

I assume that you have the requisite undergraduate operating systems background. If not, I encourage you to pick up an undergraduate OS textbook. Being more intelligent than the average undergraduate, you should be able to read the text in a few weeks and gain at least a reasonable (though perhaps not in-depth) understanding of the undergraduate material — enough to keep up with the course.

In addition to the summaries and in-class discussions for the assigned readings, you will write a research paper or a survey paper on some OS-related topic. To do this, you will form into groups of 3–4 students, determine an additional list of self-selected readings of 6–8 recent research papers from an OS sub-area, read these carefully and critically, and write a paper on what is the state-of-the-art research in this sub-area. If you want to do a research paper, you must do background research, implement your new research idea(s), and then report on your results. The emphasis is on critical thinking, analysis, and novel observations — we will run a mock conference where these papers are evaluated by the program committee (you), and then the top papers will be presented.

I encourage you to form study groups. You should also form into groups for your survey papers a few weeks into the class. Your study groups do not have to be the same as your survey paper groups — as a matter of fact, I encourage you to form different groups. It's better if your study groups are comprised of people with different interests, whereas your survey paper group members must have similar interests, since the papers that you survey must all be in some OS sub-area.

4 Textbook, Handouts, and Class Web Pages

There is no text for the course. The list of papers will be available via the class web page — look there for some advanced warning of what's coming next. Many papers are not (currently) available electronically, and I will hand those out to you the week prior to when they'll be discussed.

You should read the class Web page at

`http://www-cse.ucsd.edu/classes/wi00/cse221/`

periodically for extra "virtual" handouts, announcements, etc.

5 Grading

This course will **not** be graded on a curve. If all of you learn the material well, I will give everybody "A"s (or S or P); conversely, if none of you learn the material at all, I will give everybody "F"s (or U or NP). Your grade will be computed from your marks for the paper summaries, the in class discussion, and your survey paper as follows:

Summary	30%
Discussion	20%
Survey paper	50%

There is no final exam. In the past, the average grade has been somewhere between an B+ and an A-, but this is no guarantee of future performance.

You are encouraged to jump in and ask questions during in-class discussion. There are no laboratory assignments.