

1 Introduction

This class is CSE 227: Computer Security. The class meets on Mondays and Wednesdays from 5:00pm to 6:20pm in CSB 005.

2 Instructors and Office Hours

The instructor for this class is Prof. Bennet Yee. I just go by “Bennet” or “bsy”. Tentatively, my office hours are 2pm to 3pm on Wednesdays in my office, AP&M 5141, but you should feel free to drop by at other times. If you come by outside of office hours without first making an appointment, I may ask you to come back later if I am busy, but I will otherwise make an effort to accomodate you. You can run the command “`finger bsy@play`” to check my idle time and see if I’m in my office first. You may also email questions to me at `bsy@cs.ucsd.edu`. When my schedule is finalized, if the office hours need to be changed, I’ll announce it in class, and the new times will also be updated on the class web page.

3 Class Contents / Goals

In this class, you will learn about computer security fundamentals, including setting up a security model, security policies, design and code verification, penetration testing, some cryptography, practical operating systems security issues. After we go over the fundamentals, we will read a selection of research papers together, at a rate of two papers per class meeting. You will individually write a summary of the papers that you’ve read, due—via email, in plain text form (preferred) or in portable postscript or PDF—before the class meeting in which they are to be discussed. Additionally, you will form groups of 3–4 students, and every class meeting two groups will present to the rest of the class their synopsis *and a critique* of their assigned paper, and after the presentation we will have an in-class discussion about the paper. (The group making the presentation will not have to turn in their summaries for the paper that they present.)

The goal of the course is to prepare you to be security conscious when building applications; to understand the issues involved in building a secure application/system; to be careful about security when doing research, so that the systems that you design will not have any embarrassing gaping security holes; and, of course, to converse intelligently at Computer Security cocktail parties.

I will assume that you have the requisite compilers, operating systems, and basic theory background. If I use some concepts that weren’t covered thoroughly in other courses, *be sure to speak up and ask me to explain*—you probably aren’t alone and others will also benefit from an explanation.

4 Textbook, Handouts, and Class Web Pages

There is no text for the course. The class syllabus is available via the class web page—look there for some advanced warning of what’s coming next, as well as clarifications of material presented in class.

You should check the class Web page at

<http://smac.ucsd.edu/cse227.w03/>

periodically for electronic handouts, announcements, etc. I will not be giving out any paper handouts. If you wish to archive the course web site for your own use at the end of the quarter, you may do, for example, by using the `wget` unix command. The contents will change as information is added over the quarter, so if you try to do this for off-line reading (e.g., on your laptop), make sure to get fresh copies of the web pages frequently!

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); conversely, if none of you learn the material at all, I will give everybody “F”s (or U). In the past, neither has ever happened, and grading tend to *approximate* a curve. Your grade will be computed from your marks for in class discussion and from your homework and project as follows:

Summaries	25%
Homework/Projects	25%
Midterm	20%
Final Exam	30%

Be sure to read, sign, and return the Computer Security Code of Ethics form; you will not receive a grade in the course otherwise.

You are encouraged to ask questions during in-class discussion/lecture. Remember: if you're unclear about something I said, there are probably a couple other people in the class who are in the same situation.