ECS 122A — Course Information — Fall 1996

Note: you are responsible for everything on this handout.

Lectures

MWF 3:10–4:00 in **Chem 176**. The CRN for this class is **67955**.

Instructor

Prof. Phillip Rogaway
Engineering II, #3063
Phone: 752–7583
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http://wwwcsif.cs.ucdavis.edu/~rogaway/

Office hours: **W 9:30–11:00** and **R 9:30–10:30**

Teaching Assistant

John Black
`blackj@cs.ucdavis.edu`

Office hours: **R 2–4** in Engineering II, #053 (in the basement).
Also **W 4–5** in 1134 Bainer See below.

Optional Discussion Section

We have reserved **W 4–5** in 1134 Bainer for an "optional discussion section." In contrast to the Thursday office hours, John may prepare some material to present to you during this time.

Midterm

There will be a single midterm, to be given in class on **Friday, November 1.** Closed book, closed notes.

Final

Exam group V: 10:30 – 12:30 on **Saturday, Dec. 14.** Closed book, closed notes.

Grading

There will be

(nearly) weekly problem sets (9 in all) — **30%**,
a midterm — **25%**,
and a final — **45%**.

Prerequisites

You should have already taken ECS 100 and ECS 110.

Text

Introduction to Algorithms, by Cormen, Leiserson and Rivest. Often called "CLR." The book is huge. Fortunately, the same book is used for 122B and 222A, should you end up taking either of these classes in the future. It's a good reference for the practicing computer scientist. Clearly we will not cover all of its 1000+ pages.

Course Web page

http://wwwcsif.cs.ucdavis.edu/~rogaway/classes/122A/fall96/handouts.html

You can access the page directly (you might want to set a bookmark) or you can navigate from the CS Department's home page. Visit the page every now and then to see what's new.

Course Newsgroups

`ucd.class.ecs122a` — This is for me or John to communicate things of general concern to the class (most typically, correction to any homework problems found to be in error). Please read this newsgroup regularly; you are responsible for anything on it. Don't post to this newsgroup. Use the following newsgroup instead.

`ucd.class.ecs122a.d` — This is the "discusssion" newsgroup which you may use to communicate among yourselves, and also to ask questions directed to other students at large, me, or the TA. You may want to read this newsgroup or not — the the choice is yours. Please do not post what amounts to solutions to homework problems to the newsgroup — that's not what we mean by encouraging collaboration!

Handouts

If you miss picking up a handout, please grab it off the Web. I won't retain extra copies.

Problems Sets

Homeworks will usually be assigned on a Friday and will usually be due on the following Friday. We will deviate from for Thanksgiving and the week of the midterm.

Homeworks are due at the beginning of class on the date specified on the assignment. Leave your homeworks in the box by the door as you come into class. If your homework spans multiple pages, staple the sheets together. Leave the pages unfolded. Please, no late problem sets.

Much of what one learns in this course comes from trying to solve problems, so work hard on them. I hope that you will find some of the problems quite challenging. Doing a conscientious job on the homeworks is the best preparation for the exams.

Be clear, terse and neat in your writeups. Understandability of the solution is as necessary as correctness; expect to lose points if you provide a "correct" solution with a not-so-good writeup. As with an English paper, you can't expect to turn in a first draft: it takes refinement to describe something well. Typeset solutions are always appreciated.

If you can't solve a problem, briefly indicate what you've tried and where the difficulty lies. I prefer absent solutions to wrong ones and we'll try to have the grades reflect that. Know what you know and be clear about it.

I find that students are often more willing to spend long hours in front of a machine than they are willing to spend those same hours thinking about a problem. Don't be that way.

Please see the TA, John Black, if you think a problem was misgraded.

Collaboration

Collaboration on homeworks is permitted. But the manner in which you can collaborate can have a big impact in how much you learn from the homeworks. First, think about the problems and try to solve them yourself. If you've worked for some hours on a problem and aren't getting it, you can discuss it with other students (or with me or with John). Regardless, write up problems entirely on your own. And —this is important— when you discuss a problem with anyone, make certain to acknowledge them.

A friendly warning

My classes are *hard*! I really want you to think. Don't try to solve the problems by doing some sort of "pattern matching." It really won't work.

You might find any of the following hints helpful. (1) Do the reading before each lecture. (I'll always tell you what will be the next appropriate reading.) (2) Don't get behind. (3) Be selective in note-taking. (Often it works better to just sit there and really *listen*.) (4) If you feel you need comprehensive notes, team up with someone else so that you only sometimes have to scribe notes. (5) If you get involved in a study group, don't let the emphasis degenerate into collective attempts to solve the homework problems. You'll learn more struggling on your own.

Syllabus

Look on-line for a rough syllabus. By the end of the term the approximate syllabus will be replaced by a lecture-by-lecture list of the topics we actually covered.

Parting Thoughts

Don't forget: not only are algorithms at the core of computer science—but also they are *fun*!