

CSCI 383 Fall 2007

Alexa Sharp
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M 2-3pm W 2-4pm F 1-2pm

Syllabus

King 223E
x5-8831

Overview

This course focuses on the fundamentals of computer science – how do we model computation? how do different models differ in power? where did computers come from? are there limits to what computers can do? In addition, we explore the link between computation and art, music, biology, natural language, math, and anything else I can come up with in the coming weeks.

This course aims to cultivate the student’s sense of history of computer science, to develop the student’s natural aesthetic for proofs and logical thinking, and to familiarize the student with the strengths and weaknesses of different computation models.

Materials

We are using Dexter Kozen’s *Automata and Computability*, published by Springer. We will follow the text fairly closely until Thanksgiving, and then will branch out on our own.

Course Requirements

This course requires a lot, but it will be worth it! There will be 12-ish assignments, three midterm exams, a final exam, and pop quizzes. What I’m most excited about is that you will all get a chance to co-teach some lectures! I will grade the assignments, exams, and quizzes, but your lectures will be evaluated only by your peers (I think). This is an experiment on my part, and I hope that it works for both you and me. In any case, your grade will consist of the following.

Homework Assignments	50%
Midterms	21%
Final	9%
Lecture	5%
Attendance, Participation, and Quizzes	10%

Attendance

Attendance is mandatory! You may miss up to 2 lectures without reason. For subsequent absences, please send me an email in advance and I will evaluate the merit of your absence on a case-by-case basis. I’m reasonable, but I also want you in class.

Late Policy

As much as possible, please try to submit your assignments on time. If that doesn't seem like it's going to happen, please try to tell me in advance. I'm pretty reasonable. However, I *would* like to grade all the assignments in one go, so you mustmustmust hand in your assignment before I start grading. This could be way optimistic, but I'd like to try to return assignments by the following class, and it takes about 24 hours to grade, so say you have a 24 hour window of opportunity to be late. Not a lot of time, but a little. This may change if and when I get behind in grading.

Hand in

You may hand in your assignment electronically only if it is prepared with LaTeX. I refuse to read math notation in word documents. Besides, your stuff looks golden when you typeset with LaTeX. You are required to LaTeX your first three assignments (hw0, hw1, and hw2), but after that you may hand-write your assignments if you choose.

Honor Code

I take the honor code very seriously, and will report any violations to the Honor Code Committee.

This is a class where working with your peers is not only allowed, it is encouraged. However, the assignments you hand in must be written up by yourself and represent your own thoughts and work. In particular, you may discuss ideas with your classmates, but do not write anything down. If you really understand the discussion, you should be able to reconstruct it on your own. You may not use the internet or other references other than the textbook, unless told otherwise.

If you do work with a friend or friends, please write your cohorts names on the top of your assignment. This is important, and I certainly think no less of you if you work with your classmates.

Separate rules will apply to your exams, which will be explained at the appropriate time.

Finally, you must write the honor code on every assignment, quiz, and exam, along with your signature. You know the drill by now. For the record, the honor code is

“I affirm that I have adhered to the Honor Code in this assignment.”

If you submit your assignment electronically (with LaTeX) you must type this out with your name somewhere on your assignment.

Student Disabilities

If you require special accomodation (such as additional time to complete exams), please speak to me during the first week of class so that she has time to make suitable arrangements. You must be registered with Laura Slocum Coordinator of Services for Students with Disabilities.
