CS 373 Spring 2015 Syllabus

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If you have questions related to homework problems or general questions about stuff covered in class, see the TA during their office hours, schedule an appointment to see the TA, see me during my office hours, or e-mail one of us.

We will be using Blackboard to post assignments and other stuff.

The book is Introduction to the Theory of Computation, Third Edition, Michael Sipser, ISBN 19781133187790. We will be covering some of chapter 0 and chapters 1 – 5. We will also cover one additional topic for a class or two.

Prerequisites
- CS 140 (Programming with objects)
- Math 314 (Discrete math) or Math 330 (Number systems)

This course is required for a BS in computer science.

Lecture: Tuesday/Thursday 4:25pm – 5:50pm, LN G208 / Tuesday/Thursday 6:00pm – 7:25pm, LN G208
Activity: Monday 5:50pm – 7:15pm, LH 004, TA teaching / Monday 7:25pm – 8:50pm, LH 004, TA teaching

Grading
- Tests (44% of grade, two tests, 22% each)
  - Final exam is cumulative, with more emphasis on topics covered after the first test
    - The last two topics, decidability and reducibility, are difficult
  - I grade the tests
  - One sheet of notes (8½" x 11", both sides) for the first test and two for final exam
- Homework (18% of grade, 10 homework sets, each homework set has the same weight)
  - Homework is due at the end of lecture on the date due
  - TA grades
  - Worst homework assignment dropped
- Quizzes (18% of grade)
  - One or two questions, 10 – 15 minutes
  - Each week as part of activity section
  - Worst two quizzes dropped
  - I grade
- Presentation (2% of grade)
  - Present solution to a homework problem, test problem, or quiz problem in activity section
  - Approximately equal to one homework assignment
  - TA takes care of this
- Programming assignments (18% of grade, 1 large (5 points), 1 medium (3 points), 4 small (8 points, 2 points each), 1 other (2 points))
  - Application program (1 other)

- JFLAP finite automata (1 small)
- JFLAP pushdown automata (1 medium, 1 small)
- JFLAP Turing machine (1 large, 2 small)
- Submit program via e-mail to me by midnight on the date due
- Writing assignment (may or may not due)
  - If this course is required to evaluate written work, then 2% assignment will replace 1% of each of the two tests
- Homework and programming assignments are to be your own work
  - If the TA is confident that your solution is not your own work, he will grade it appropriately
- You can turn in up to three assignments one week late (homework or program)
  - Late homework assignments are full credit until the starting time of the activity section the week after the due date
    - Half credit after that (since the TA should have gone over the problems as part of the activity section)

Grades
A [94, 100], A- [90, 93], B+ [87, 89], B [83, 86], B- [80, 82], C+ [77, 79], C [73, 76], C- [70, 72], D [65, 69]

Homework, programs, and the project are to be your own work. You are free to discuss ideas with others, but what you turn in is to be your own work.

As part of the ABET accreditation, two of the areas that are being measured in this course are presentation skills and written work.

JFLAP (Java Formal Languages and Automata Package)
- Can be used for constructing and working with formal languages (finite automata, pushdown automata, context free grammars, Turing machines, etc)
- Can be downloaded from www.jflap.org
- Feel free to use it on your homework
- JFLAP is fairly simple to use

Attendance
- You are responsible for the course content covered during the lectures
- The schedule is approximate
- I don't count attendance as part of your grade
  - Past history has shown that if you don't come to class or do the homework, your grade is lower than if you do come to class and do the homework

Classroom etiquette
- Your cellphone should not be consuming or generating noise

Each topic builds upon the previous topic, so if you can't construct a finite automata, you won't be able to construct pushdown automata or Turing machines. If your are having trouble with a particular topic see the TA or me as soon as possible.

Faculty senate syllabus statement on credit hours and course expectations (05/06/2014)
- This course is a 4 credit course, which means that in addition to the scheduled meeting times (lecture – 3 hours), students are expected to do at least 9.5 hours of course related work outside of class each week during the semester. This includes time spent completing assigned readings, participating in lab sessions, studying for tests and examinations, preparing written assignments, and other course related tasks.