

Syllabus (Policy) CMSC 452: Elementary Theory of Computation

<http://www/cs.umd.edu/~gasarch/COURSES/452/S14/S14.html>

Overview: The Theory of Comp. is concerned with the following problem: given a set, how difficult is it? In a course in algorithms you would ask for an upper bound. Here we ask for both upper and lower bounds.

Class Time and Place: Tu-Th 2-3:15, CMSC 2120. Jan 28-May 13 EXCEPT for spring break March 16-March 23. (NOTE- school begins Monday Jan 27, but since our class is Tu-Th I just list Jan 28-May 13.)

GRADING: There will be (roughly) weekly HW, one midterm, and one final. HW is worth ROUGHLY 25% (2% each HW which prob won't get up to quite %25), two MINI (non programming) PROJECTS worth 5% each, the midterm is worth 30%, and Final is worth ROUGHLY 35% (whatever is left, probably a bit more than %35). There may also be an optional project that will only be used to bump your grade from an F to a D or from a D to a C. *MIDTERM:* Apr 9, 6-8:00PM. Room CSI 3117. If you cannot make this tell me by *Feb 11, 2014* in which case we will arrange a makeup. IF YOU DO NOT CONTACT ME BY FEB 11 YOU MIGHT NOT GET A MAKEUP!!!! *FINAL:* Monday May 19 10:30AM-12:30AM For HW, Midterm, Final you must hand in your own work- academic dishonesty will be dealt with harshly, resulting in a hearing in front of the acad honor council. HW must be *neatly* written. You will lose points for sloppiness.

If you miss the midterm for a legitimate unforsseable excuse contact me AS SOON AS POSSIBLE.

HW, Mid, Final Excuse Policy: The HW will typically be DUE on Tues. However, you can hand it in two days later on Thur. I regard this as having given you a 2-day extension. So if you are sick (without doctors note) or have a personal crisis or whatever then you do indeed get an extension from Tue to Thur. Any other extension will be given with documentation (e.g., a doctors note). If you miss an exam and can provide a documented excuse within a day then you will get a makeup. If you know you will not be able to take an exam or do a HW on time ahead of time for Religious or other reasonable reasons, let me know during the first week.

Office Hours and Contact Information Prof Gasarch, AVW 3245, 405-2698, gasarch@cs.umd.edu. Off. Hrs: Tu: 11:00-12:30, 3:30-4:30 (I can stay later). Th 3:30-4:30. Or by apt. TA Manish Purohit manishp@cs.umd.edu. Off Hrs: Mo 10-12 in AVW 4103.

Accommodations: Students requesting academic accommodations due to a disability should make such a request to the instructor in office hours, with a letter of accommodation from the Office of Disability Support Services (DSS) within the first two weeks of the semester.

Course Evaluations In May you will be asked to fill out course evals. I will urge you to fill it out carefully.

Text: All texts are expensive. Most texts on Automata theory are fine. I would advice you to buy one used and cheap. Here are some recommendations. (1) **Intro to Theory of Computation** by Sipser, (2) **Intro to Automata theory, Languages, and Computation**, by Hopcroft, Motwanni, and Ullman. (3) **Elements of the Theory of Computation** by

Lewis and Papadimitriou. (4) **Theory of Computation: A Gentle Intro** by Kinber and Smith.

Prerequisites: CMSC 351 or Permission of the instructor.

Laptop Policy: Laptops not allowed in class unless you are taking notes with it.