Overview: This course will teach you how to prove theorems and then actually prove theorems. We cover combinatorics, probability, number theory, induction.

Class Time and Place: Tu-Th 3:30-4:45, CSIC 2107 (NOTE- this is a change, not a typo. It was originally in IRB 2107. Really! What are the odds of that? We’ll find out when we do probability! But the key now is CSIC 2107.)

Recitation Time and Place: M-W 5:00-5:50, IRB 2107

Exceptions to All Rules Below: Serious illness (Doctors’ Note) or Religious holidays my override any of the rules below.

Point Distribution: There will be (roughly) weekly HW (15% total), Honors HW (see below) (5%), 2 midterm (20% each, so 40%), 1 final (35%), and one visit to my office to talk about your hopes and dreams (5%).

HW: HW will be DUE on MONDAY (before recitation begins) by Gradescope. however, you can submit it in two days later on Wednesday (before recitation begins- the TA may want to discuss the solution in recitation) without penalty. 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 Monday to Wednesday. Since I already gave you a two-day extension any other extension is unlikely. NOTE- HW must be TYPED. NOTE- you may lose points if your answer is not well written.

Honors HW: This is an Honors course! This has two effects. (1) sometimes I will, instead of teaching, have you work in groups on a really interesting problem. When I do this I may assign a HW related to that problem. There are honors HW. (2) the recitation will go over HW and do examples like recitations do, on WEDNESDAY There will be a mini-course on probability on MONDAY. That will involve some light HW, also called honors HW.

Midterm: Midterm One is Tuesday Feb 26. Midterm Two is Tuesday April 2. Both midterms will be in class. If you cannot make either one then you must contact me by Feb 12. If you miss a midterm for a legitimate unforeseeable excuse contact me ASAP.

Final: The final is officially scheduled for Wed May 22, 10:30AM-12:30PM. If you cannot make it then you must contact me by Feb 12. If you miss the final for a legitimate unforeseeable excuse contact me by ASAP.

On HW, Midterm, Final: You can lose points for sloppiness.

Academic Dishonesty: For HW, Midterm, Final you must hand in your own work–academic dishonesty will be dealt with harshly.

Office Hours and Contact Information: Prof Gasarch, AVW 3245, 405-2698, gasarch@cs.umd.edu. OH: Tu-Th 2:00-3:15. He is Usually around other than that as well. TAs are Karthik Abinav - his Office hours: Wed 4-5. Josh Twitty - his Office hours: Mon 11-12. TA office hours are in AVW 4103. We also use Piazza.

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: I will be giving out a FREE copy of *Essential Discrete Mathematics for Computer Science* by Lewis and Zax. It is in preprint form. The authors want us to give them commentary on it. (Disclosure- Lewis was my PhD advisor.)

PREREQUISITES: CMSC 351 or Permission of the instructor.

LAPTOP POLICY: Laptops not allowed in class unless you are taking notes with it.