CS2050 Intro Discrete Math for CS
Syllabus

Instructor: David Smith, Email: david.smith@cc.gatech.edu

TAs:
TA Office Hours: Office hours will be held in CCB 130. We will post the office hours schedule on T-Square and also physically on the door of CCB 130.

Textbooks:
- Discrete Mathematics and Its Applications by Kenneth Rosen, 7th edition. 2011. (This is a somewhat new edition! Yes, you need it. This book is seriously not optional. Feel free to get the hardcover version, kindle version, loose leaf version, rental version, as that part doesn’t matter. It must not be an international edition, nor an older edition. (If you rely on either of those, you will need a friend that is willing to share the homework questions from the correct edition. Also, the section numbers will not be the same.) ISBN: 978-0073383095.
- Student Solutions Guide for Discrete Mathematics and Its Applications. 7th edition. ISBN: 978-0-07-735350-6 (This is extremely helpful as it walks you through all the solutions of the odd numbered problems.) DO NOT GET A DIFFERENT EDITION. Homework assignment problems will come mainly, if not entirely, from the textbook and will be based on the 7th editions numbering. It is the students responsibility to turn in the correct assigned problems. Do not purchase the international edition of the book, nor an older edition.

List of Topics:
- Propositions, Proofs, Propositional Logic
- Induction and Recursion
- Basic Counting and Probability
- Number Theory: Euclid's Algorithm, Primality, RSA
- Models of Computation such as Finite Automata and Regular Expressions
- Application of techniques to domains of relevance to computer science

Course Objectives:
Help students gain an understanding of basic primitives and paradigms of the mathematical theory of computation. Students will learn to write formal proofs and understand logic. Various areas of mathematics are explored to help provide a foundation for computation. The course provides a basis for understanding and developing clear logic, understanding simple encryption techniques, writing regular expressions, designing computational models and more.
Grade Breakdown:

Homework ....................................................... 15%
Exams ........................................................... 20% each x 3 regular exams) = 60%
Final Exam ....................................................... 25%

There is no curve and no rounding in this course. Letter grades are calculated on a straight scale.

90.00 and above ................................................. A
80.00 to 89.99 ................................................ B
70.00 to 79.99 ................................................ C
60.00 to 69.99 ................................................ D
below 60.00 ..................................................... F

In addition to meeting these cutoffs, you must also have a passing weighted average on the exams and final to pass the course.

Timely Handling of Grade Disputes: Grade disputes for assignments, exams, etc. must be discussed within one week of being available for return. All grade disputes are to be turned in to the Head TA. A regrade form is required and is available on T-Square under Resources and also preprinted in CCB 130.

Exam Policy: There are no makeups for missed exams. Any request for an exception to this policy must be made in advance unless impossible. The request must be due to incapacitating illness, death in the family, or something similarly serious and be accompanied by supporting documentation. Events such as vacationing, errands, work conflicts, sleeping through your alarm, alarm malfunction, not being aware of the exam are not valid excuses. What is and what is not a valid excuse and proper documentation is at the sole discretion of the instructor.

Homework: Homework is assigned weekly and due at the start of class as noted on the assignment. The assignment itself will be sent out via T-Square. Homework will be turned in on paper. Late homework is not accepted. There are no makeups for missed homework assignments.

Attendance Policy: Lecture and recitation attendance is required and expected.

Collaboration Policy: Collaboration with other students in this current semester’s CS2050 can be an important learning technique. With this learning opportunity comes responsibility. You must understand the difference between collaboration and plagiarism.

- Students may only collaborate with fellow students currently taking CS 2050, the TA and the lecturer.
- Collaboration means talking through problems, assisting each other with understanding, explaining a concept, etc. You are not allowed to simply exchange or write answers for others.
- Over-reliance on others will undermine your mastering of the subject and ultimately your ability to perform on exams.
- We reserve the right to give a 0 on duplicated HW and/or pursue academic misconduct charges.