Mathematics 2602: Linear and Discrete Mathematics
Section K, Spring 2013, Georgia Institute of Technology
http://www.math.gatech.edu/~margalit/classes/math2602

Course Objectives

The main goals of this course are to develop mathematical maturity and problem solving skills, in particular, to be able to construct and understand mathematical arguments. We achieve these goals through the study the various important concepts in the following areas of discrete mathematics: logic, counting, algorithms, and graphs.

Professor

Prof. Margalit, Skiles 244, *margalit@math.gatech.edu*, (404) 894-2715.

Class Meetings

Lectures are Tuesdays and Thursdays, from 1:35 until 2:55 pm in Howey L2.

Textbook

Discrete Mathematics and Its Applications, Kenneth H. Rosen, 7th edition.

Office Hours

In Skiles 244, Tuesdays 3-4, Wednesdays 2-3, and by appointment.

Clickers

This course uses Turning Point clickers. Grades are based on participation.

Homework and Quizzes

Homework is assigned on the web site. It is not collected. Quizzes are given in section and are based on the homework. The lowest quiz score will be dropped.

Sections

	Classroom	TA	Email	Office Hour
K1	Skiles 168	Himanshu Sahni	hsahni3@gatech.edu	Skiles 140
K2	Skiles 270	Ben Yeh	pyeh9@gatech.edu	Skiles 230
K3	Skiles 254	Conrad Rybka	cjconrad2@gatech.edu	Skiles 230

Sections are held on Mon and Wed 3:05-3:55. You must go to your assigned section.

Grading

Quizzes 10%, Midterms 20% each, Final Exam 30%, Clickers 3%. There are no makeups.

Honor Code

All students are expected to abide by the student honor code: *http://www.honor.gatech.edu*

Semester at a Glance

January 7 *First section meeting*	8 *1.1-1.2 Propositional logic*	9 *Quiz 0 (extra credit)*	10 *1.3 Propositional equivalence*	11 *Last day to drop without a W*
14	15 *1.4 Predicates and quantifiers*	16 *Quiz 1*	17 *1.5 Nested quantifiers*	18
21 *Martin Luther King Day*	22 *1.6-1.7 Rules of inference and proofs*	23 *Quiz 2*	24 *1.8 Proof methods*	25
28	29 *3.1-3.2 Algorithms*	30	31 ***First Midterm***	February 1
4	5 *3.2 Growth of functions*	6 *Quiz 3*	7 *3.3 Complexity of algorithms*	8
11	12 *5.1 Induction*	13 *Quiz 4*	14 *5.2 Strong induction*	15
18	19 *5.3 Recursion*	20 *Quiz 5*	21 *5.4 Recursive algorithms*	22
25	26 *6.1-6.2 Counting*	27	28 ***Second Midterm***	March 1 *Last day to drop w/ W Last day to elect pass/fail*
4	5 *6.3 Permutations and combinations*	6 *Quiz 6*	7 *6.4-6.5 Binomial coefficients*	8
11	12 *8.1-8.2 Recurrence relations*	13 *Quiz 7*	14 *8.3 Divide and conquer*	15
18 *Spring Break*	19 *Spring Break*	20 *Spring Break*	21 *Spring Break*	22 *Spring Break*
25	26 *8.5 Inclusion-exclusion*	27 *Quiz 8*	28 *8.6 Applications of inclusion-exclusion*	29
Apr 1	2 *10.1-10.3 Graphs*	3	4 ***Third Midterm***	5
8	9 *10.5 Euler and Hamilton paths*	10 *Quiz 9*	11 *10.6 Shortest paths*	12
15	16 *10.7 Planar graphs*	17 *Quiz 10*	18 *10.8 Graph coloring*	19
22	23 *11.1-11.3 Trees*	24 *Quiz 11*	25 *11.4-11.5 Spanning trees*	26 *Last day of class*
29	30	May 1	2 ***Final Exam 2:50-5:40***	3

Dates are subject to change. Any changes will be announced in class and on the course web site.