

Mathematics 3012A  
Applied Combinatorics  
Summer Semester 2005

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**1. General Information.** This information sheet, as well as assignments and other course information, is posted at [www.math.gatech.edu/~andrew](http://www.math.gatech.edu/~andrew).

Math 3012A meets at 10:40 – 11:50 on Mondays, Wednesdays, and Fridays. Office hours will be Monday, Wednesday, and Friday from 9:00 - 10:00.

**2. Text and Material.** The text for this course is *Discrete and Combinatorial Mathematics*, by Ralph Grimaldi. Topics covered include counting principles (Chapter 1), induction and number theory (Chapter 4), relations and functions (Chapter 5), the principle of inclusion and exclusion (Chapter 8), generating functions (Chapter 9), recurrence relations (Chapter 10), introduction to graph theory and trees (Chapters 11 and 12). A more detailed course outline will be posted on the web.

**3. Homework and Tests.** Homework will be assigned and collected on Fridays, and a proper subset of each assignment will be graded. We strongly urge you to do all of the assigned problems. You may use computers and calculators on homework, but be sure to explain your work. There will be two hour tests and a final exam. Tentative dates for hour tests are

Hour Test 1	10 June
Hour Test 2	15 July

I discourage make-up exams. Make-up tests will be given only when authorized **in advance** by the instructor.

**4. Grading.** The hour tests, homework, and final examination will be counted with the following weights.

Hour Tests	50%
Homework	10%
Final Examination	40%

Letter grades will be based on the overall average at the end of the term, with cutoffs at least as favorable as 90, 80, 70, 60.

**5. Honor Code.** Please review the Georgia Tech Honor Code. All examinations in this course are closed book. No notes may be used. You may discuss homework with each other, but I expect you to write your solutions yourself. The work you ultimately submit must be your own.