

Math 3012, Section J

MWF 2:05-2:55 in Skiles 243

Course Information:

Instructor: Kevin Costello

Office: Skiles 137

E-mail: kcostell@math.gatech.edu

Phone: 5-7530

Office Hours: Tuesday 4-5:30, Friday 10:30-12:00 (**Tentative!**)

Textbook: *Discrete and Combinatorial Mathematics: An Applied Introduction* by R. Grimadi (5th edition)

Course Website: www.math.gatech.edu/~kcostell/Math3012

Topics to be Covered:

My plan is to cover:

- Principles of counting (chapter 1)
- Mathematical induction and elementary number theory (chapter 4)
- Relations, functions, and the pigeonhole principle (portions of chapter 5)
- Inclusion/exclusion (chapter 8)
- Generating functions (chapter 9)
- Recurrence relations (chapter 10)
- Introductory Graph Theory (chapter 11)
- Trees (chapter 12)
- Algorithms for Optimization and Matching (Chapter 13)

However, this may change. Keep an eye on the course website for updates as the semester goes on

Homework:

Homework assignments will be announced in class and also posted on the course website. Typically assignments will be announced on Wednesday and due at the beginning of class one week later. Late homework will typically *not* be accepted! While you are welcome to collaborate on homework assignments, you must write up your own solutions to each assignment.

Quizzes and Final Examination:

There will be three 50-minute long quizzes, tentatively scheduled for Sep. 15 (Monday),

Oct. 10 (Friday) and Nov 10 (Monday). These dates will be confirmed at least one week in advance) All of these examinations will be closed book, closed notes, and non-calculator.

The final examination for this class is Wednesday, December 10th from 11:30 to 2:20. Again, it will be closed book and closed notes.

Grading:

Your grade will be a weighted average of your scores on the homework, quizzes, and final examination. The weighting will be

- Homework: 20%
- Quizzes: 15% each (45% total)
- Final Exam: 35%

Letter grades will be based on cutoffs at least as favorable as 90%+=A, 80%+=B, 70%+=C, 60%+=D.

Other Resources:

The Math Lab in Skiles 255 offers free tutoring from 11-5 on Monday-Thursday. Not all tutors may be equipped to deal with Math 3012 – check the schedule on the Math Lab website (<http://www.math.gatech.edu/academic/undergraduate/mathlab.html>).

The Honor Code:

The Georgia Tech honor code is available online at honor.gatech.edu. Any violations of this code (including violations of the collaboration policy on homeworks or the use of illicit material on examinations) will be reported to the Dean of Students.