

# Mathematics 2345 : Discrete Mathematics

## Topics for Exam 3

Fall 2011

The following list of topics may help you in your preparation for the test. Emphasis will be placed on solving recurrence relations (Chapter 7). *Know* the Master Method!

- ( Everything covered in Exams 1 & 2 . . . , okay, just review before the final !)
- Section 4.1 Mathematical Induction - may see another proof
- Section 4.2 Strong Induction
- Section 4.3 Recursive Definitions and Structural Induction
- Section 4.4 Recursive Algorithms
- Section 4.5 Program Correctness
- Section 7.1 Recurrence Relations
- Section 7.2 Solving Recurrence Relations (also, Iteration Method)
- Section 7.3 Divide-and-Conquer Relations (Master Method, see Theorem 2, page 479))