

Course Outline — FALL 2005

**MATH 213** (Section F1)

INTRODUCTION TO  
DISCRETE MATHEMATICS

**2 pm MWF, 147 Altgeld Hall**

**Textbook** Kenneth H. ROSEN: *Discrete Mathematics and its Applications*, Fifth Edition

**Instructor:** Alexandr Kostochka, 234 Illini Hall,

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office hours: 3–4 MWF (temporarily), or by appointment

Final Exam: 1:30pm, Friday, December 16

**SYLLABUS**

1. CHAPTER 1 (Foundations): Sections 1.6–1.8.	3 days.
2. Chapter 2 (Algorithms): Sections 2.1–2.3.	3 days.
3. CHAPTER 3 (Sequences and Mathematical Induction) Sections 3.1–3.2.	3 days.
4. CHAPTER 4 (Counting) Sections 4.1–4.5.	5 days.
First Hour Exam.	1 day.
5. CHAPTER 5 (Discrete Probability) Sections 5.1–5.3.	3 days.
6. CHAPTER 6 (Recurrences and Inclusion-Exclusion) Sections 6.1, 6.2 and 6.5–6.6.	7 days.
7. CHAPTER 7 (Relations) Sections 7.1, 7.3, and 7.5.	3 days.
Second Hour Exam.	1 day.
8. CHAPTER 8 (Graphs) Sections 8.1–8.8.	6 days.
9. CHAPTER 9 (Trees)	5 days.
Third Hour Exam.	1 day.
Review and Leeway	2 days.

**Requirements:** Weekly problem sets (the ten highest homework grades count), quizzes (the ten highest quiz grades count), three tests and a final examination. Weighting: homeworks  $20 \times 10 = 200$  points, quizzes  $10 \times 10 = 100$  points, tests  $100 \times 3 = 300$  points, final exam 200 points, total 800 points.