

Course Information

CS 330 Discrete Structures
Fall Semester, 2009

Staff

Professor: Edward M. Reingold (reingold@iit.edu)

Office: Suite 228F Stuart Building

Office Hours: Monday & Wednesday, 10am–11am, immediately after class, or by appointment

Teaching Assistant: Kenneth Bloom (kbloom1+cs330@iit.edu)

Office: Room 6 Stuart Building (basement)

Office Hours: Tuesday, 1pm–2pm, Friday immediately after the discussion section,
or by appointment

Lecture Schedule

Class meets from August 24 to December 7, Mondays and Wednesdays, 11:25am–12:40pm in 113 Stuart Building; there is a discussion section with the TA on Fridays, 11:25am–12:15pm, also in 113 Stuart Building.

There will be no classes on September 7 (Labor Day), September 28 (Yom Kippur), October 12 (Fall Break), or November 25 (Thanksgiving Vacation).

Textbook

Discrete Mathematics and Its Applications by Kenneth H. Rosen, 6th edition, McGraw-Hill, 2006. Do not use any earlier edition.

Prerequisites

You are presumed to know computer programming, high school mathematics, and some calculus.

Course Outline

[1 lecture] Introduction.

[2 lectures] Mathematical Reasoning (Rosen, Chapters 1–4).

[10 lectures] Counting/Probability (Rosen, Chapters 5–6).

[3 lectures] Recurrences (Rosen, Chapter 7; notes).

[1 lecture] Divide and Conquer (Rosen, section 7.3; notes).

[1 lecture] Greedy Algorithms (Rosen, pages 174–176, 275–276; notes).

[3 lectures] Graphs (Rosen, Chapters 9–10; notes).

[4 lectures] Finite-State Machines, CFLs, BNF (Rosen, Chapter 12; notes).

Homepage and Handouts

All handouts will be in PDF on the class webpage at: www.cs.iit.edu/~cs330. This web site may be used to post announcements, so look at it frequently.

Lecture Notes

Lecture notes will be available on the class webpage shortly before or after the lecture. This is for your convenience, *but it is not a substitute for attending the lectures*—there is no guarantee that the notes are complete.

Reading Assignments

The list of reading assignments (on the web site given above) for the semester indicates the material that is to be read *before* each lecture.

Homework

There will be about eight homework assignments (roughly one every two weeks). You may discuss only general problem-solving strategies with other students; your homework solutions *must be entirely your own work* and clearly distinguished from other homeworks. Academic dishonesty will be severely punished.

Homework may be handed in without penalty until solutions are posted, but may *not* be handed in thereafter.

Examinations

There will be three equally weighted, non-cumulative, open-book, in-class exams:

- Exam 1: In class, Wednesday, September 23, 2009
- Exam 2: In class, Wednesday, November 4, 2009
- Exam 3: 10:30am–11:45am, Friday, December 11, 2009

There is no final exam, per se.

During the lectures certain problems will be noted as “good exam questions.” Some of these problems may appear on exams.

Bugs

Occasionally Professor Reingold, being human, makes mistakes in lectures. If you catch one, and point it out on the spot in lecture, you’ll be rewarded with a very valuable green glow-in-the-dark plastic bug. Aside from its intrinsic beauty and value, it is worth extra credit toward your final grade: On “Bug Day” at the end of the semester, bring your collection in to be counted and noted in the Blackboard grade records.

Grading Policy

The *approximate* weighting scheme will be 25% for the homework assignments and 25% for each of the exams.

Grade Distribution

The last time that Professor Reingold taught CS 330 (Spring, 2008), the distribution of final grades was 13 A, 11 B, 10 C, 2 D, and 2 F.