Course Information
CS 330 Discrete Structures
Spring Semester, 2015

Staff
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Office: Suite 228F Stuart Building (312) 567-3309
Office Hours: Monday & Wednesday, 10am–11am, immediately after class, or by appointment

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Office Hours: Tuesday 11am–1pm & Wednesday, 2pm–4pm, or by appointment

Lecture Schedule
Class meets from January 12 to April 29, Mondays and Wednesdays, 11:25am–12:40pm in 111 Stuart Building; there is a recitation section with the TA on Fridays, 11:25am–12:15pm, also in 111 Stuart Building. There will be no classes on January 19 (Martin Luther King Day) or March 16–22 (Spring Break).

Textbook

Prerequisites
You are presumed to know computer programming, high school mathematics, and basic differential & integral calculus.

Course Outline
[1 lecture, Jan 12] Introduction.
[5 lectures, Jan 26–Feb 9] Counting & Binomial Theorem (Rosen, Chapter 6).
Exam I, Feb 11
[1 lecture, Feb 16] Analysis of polynomial evaluation (notes).
[4 lectures, Feb 18–Mar 2] Probability (Rosen, Chapter 7).
[3 lectures, Mar 4–11] Recurrences (Rosen, Chapter 8; notes).
Spring break, Mar 16–20
[1 lecture, Mar 23] Divide and Conquer (Rosen, section 8.3; notes).
Exam II, Mar 25
[3 lectures, Apr 1–Apr 8] Graphs (Rosen, Chapters 10–11; notes).
[5 lectures, Apr 13–27] Finite-State Machines, CFLs, BNF (Rosen, Chapter 13; notes).
Bug day, Apr 27
Exam III, Apr 29
Reading Assignments

Using the course outline as a guide, please read the stated chapters before the day in which that subject is covered. These reading assignments are very important for understanding the lectures and homework.

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 (or even correct!).

Homepage and Handouts

All handouts will be in PDF on the class webpage at: [www.cs.iit.edu/~cs330](http://www.cs.iit.edu/~cs330). This website may be used to post announcements, so look at it frequently.

Homework

There will be 7 or 8 homework assignments, all due on Fridays in the recitation section. 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 not be tolerated and will 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: Wednesday, February 11, 2015
- Exam 2: Wednesday, March 25, 2015
- Exam 3: Wednesday, April 29, 2015

There is no final exam.

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

Electronic Devices

No electronic devices (laptops, Ipads, cell phones, etc.) are permitted in lectures except by special permission of Professor Reingold. None are ever allowed in the open book 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 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 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 (Fall, 2013), the distribution of final grades was 18 A, 13 B, 10 C, 4 D, and 2 E.