

Math 353 D1 MWF 11 343 Altgeld Hall Class Organization Spring 2004

Instructor: Prof. Bruce Reznick, 243 Illini Hall, 333-4284, reznick@math.uiuc.edu. My phone has voice mail and I frequently check and reply to my email, including weekends. Office hours are by appointment. I take them seriously, and they can usually be arranged within 24 hours. You are also encouraged to ask me questions immediately before and during class. I'm terrible with names; don't take it personally.

There is a graduate assistant for this course, Mr. Maosheng Xiong, who will be holding a weekly office hour/review session for this class. More details later. In the past, this course has had an unmoderated newsgroup, but the University has eliminated support of newsgroups to save money.

This course will have a webpage – <http://www.math.uiuc.edu/~reznick/math353.html>. (I'm older than the average HTML coder; your tolerance is appreciated.) This webpage will contain a “class diary”, which will summarize what happens in each class period for as long as I have the energy to do this. In any case, I will always put up links to .pdf handouts. If you email me a course question, I will post your anonymized question and my reply on the web page, for the benefit of the entire class. It will be impossible for me to post exam solutions in advance.

Text and Syllabus: The text is *Elementary Number Theory and its Applications* by Kenneth H. Rosen. We will cover the following material at least: 1.1 – 1.4, 3.1 – 3.6, 4.1 – 4.4, 6.1 – 6.3, 7.1 – 7.4, 11.1 – 11.3. Additional topics will be determined by time and class interest. Be aware that (reading, understanding, constructing) proofs are an integral part of this course.

Homework Policy: Written homework will be assigned to be due weekly. More details will be discussed with the first assignment, but the following points are crucial: **(1) Collaboration in studying and working the homework is strongly encouraged!** **(2) Collaboration without comprehension is a waste of time.** **(3) Homework solutions will be distributed when the assignment is due.** **(4) No late homework is accepted, but the lowest two homework scores (possibly zero) will be omitted in computing your homework average.** A phone and e-mail list will be distributed once the class stabilizes. It is my policy not to give specific homework help to individuals before an assignment is due. But if you ask a question in class or in email, I can further explain to *everybody* the mathematics which underlies your question.

Exam Policy: There will be two Hour Exams; we will decide later whether the exams will be in class or in the evening. All exams will be closed-book and closed-note, and will resemble the homeworks. The Final Exam is comprehensive, and somewhat harder than the Hour Exams. The Final must be held at the scheduled time, which is Friday May 14, from 8:00-11:00 AM; that is, early on the morning of the last day of finals. Sorry, but it's out of my hands.

Grading Policy: Keep in mind that I am grading your work, not you as a person. Each Hour Exam counts 25%, the Final Exam counts 50% and the Homework counts 20%. The lowest 20% is dropped. All grades are numerical. The highest possible grade cutoffs are: A/B – 90%, B/C – 80 %, C/D – 70%, D/F – 60%, by which I mean “A-/B+”, etc. I will try to keep you posted on any curving as the semester progresses. There are two exceptions to the numerical grading: anyone who gets 96% on the Final gets an A and anyone who gets 75% on the Final will pass.

Philosophy: The purpose of this course is to introduce you to number theory, one of the most classical and beautiful parts of mathematics. Education is not a zero-sum game when done correctly. I do not consider you my adversaries, and hope the feeling is mutual. Become an active participant in this course. Let it get under your skin and visit your dreams. These are serious steps towards becoming a mathematician.