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.

In the past, this course has had an unmoderated newsgroup, but the University has eliminated support of newsgroups to save money.

This course has a webpage – http://www.math.uiuc.edu/~reznick/math313.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 Introductory Combinatorics by Richard Brualdi. The syllabus is distributed separately, and is also available at http://www.math.uiuc.edu/Bourbaki/Syllabi/syl313.html

Be aware that proofs are an integral part of this course, though less central than in courses such as Math 347, 348 or 353.

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 three 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 Thursday May 13, from 8:00-11:00 AM. 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 20%, the Final Exam counts 40% and the Homework counts 15%. The lowest 15% 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. (I reserve the right to curve differently for undergrads and grads.) 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 combinatorics and to the combinatorial style of thinking. The ideas and techniques we develop here are applicable in all branches 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.