

## Information Sheet for Math 24, Theory of Numbers

Fall 2010

*MTWF 1 pm, ESNH 107*

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**Textbook:** *A Friendly Introduction to Number Theory*, Third Edition, by Joseph Silverman. You can buy the text at Amherst Books in downtown Amherst.

**What we will cover:** The book has 48 fairly short chapters. We will cover most but not all of the chapters, plus some further topics not be in the book.

Some lectures will follow the book closely, while others will be quite different. Class attendance will be very important.

The book is engaging and accessible to a very broad audience. The course will probably be a bit harder than the book. For example, I will take proofs more seriously than the book does. I'll say more about this below.

**Homework:** There will be three types of homework:

- (1) *Quick Homeworks* that ask you to do one or two small proofs. These will be assigned roughly every other week.
- (2) *Assignments* that cover several chapters worth of material. There will be six or seven assignments during the course of the semester.
- (3) Every other Monday, your job is to ask a question at the beginning of class. Anything relevant to the course is ok, except for questions like "how do you do Problem . . .?" However, questions sparked by a homework problem are ok.

**Grading:** Homework will be worth 20% of the grade. There will also be a midterm exam and a final, both worth 40% of the grade. Both exams will be open-book take-home exams.

**Philosophy:** This course has people at very different stages of their mathematical careers. My plan is to grade people relative to where they are mathematically. Hence students who have taken courses such as Math 26 or 28 will need to write really good proofs, while beginners will need to seriously engage in process of writing proofs and make progress over the course of the semester. For those in the middle (say someone who's taken Math 21 but not Math 26), I will expect decent proofs and improvement as we get deeper into the semester.

**Office Hours:** This week Wed, Thurs, Fri 10–11:30 am and 3–5 pm.

**Note:** When my office hours don't work for your schedule, meeting times are always available by appointment. Appointments are easy to get—I like talking to students! Just send me an email with the times you would like to meet.