Syllabus for
Elementary Number Theory
Math 301 A - Spring 2014

Lecturer: Dr. Matthew M. Conroy

Email: conroy@math.washington.edu
(always specify Math 301 in the subject line)

Office: In the Math Study Center, Communications B-014

Web page: www.math.washington.edu/~conroy

My office hour times can be found at the web page above. Office hours are times when you can speak to me without making an appointment - just stop by.

Purpose of the course: This course will introduce you to ideas in the field of number theory. We might discuss divisibility, primes, modular arithmetic, arithmetic functions, diophantine problems, recurrent sequences, figurative numbers, continued fractions, rational numbers and irrationality, and other things. There will be two emphases: (a) computation, i.e., the ability to solve specific problems, and (b) proof, i.e., understanding and writing proofs of number theoretic results.

Text: *An Introduction to Number Theory* by Harold Stark

Lectures: There are lectures each Monday, Wednesday and Friday. You are responsible for knowing all that goes on in lecture, but you are not explicitly required to attend. If you miss a lecture, you should copy notes from at least one other student in the class, and repay them for letting you do so, e.g., by buying them food or drink.

Homework: Homework assignments will be listed on the class website. Generally, there will be an assignment due each Friday in non-exam weeks.

You are encouraged to work with other students to complete the homework assignments. However, the work you turn in should be your own. Do not copy another student's work, and do not allow your work to be copied.

You must visit the class website and read the homework guidelines pdf before turning in any homework.

There will be homework work sessions in a location to be announced, from 4 to 6 PM, on Thursdays when a homework assignment is due the next day.

Late homework will not be accepted. However, you are allowed to miss *one* homework assignment, for any reason, without penalty to your grade. This is implemented by dropping each student's lowest homework score when calculating each student's homework average. It is always to your advantage to turn homework in rather than not.

Graded homework must be picked up no later than the end of the next class day after the day that homework is returned. Failure to do so will result in a significant reduction of points to your homework.

Exams: There will be one in-class midterm exam on **Wednesday, April 23**. There will be a final exam given during finals week. Date, time and location are on MyUW.

Exams are cumulative: you may be asked to solve problems using any techniques discussed up to that point.

Make-up exams will not be given, so don't miss exams. If you *do* miss an exam due to some unavoidable, unforeseen event (e.g. sudden illness, traffic accident, etc.) you should contact me *as soon as possible* to have the best chance of arranging some kind of adjustment.

Scientific, non-graphing calculators are allowed during exams. Other electronic devices are not allowed during exams.

Grading: Your grade will be made up of the following:

homework	30 %
midterm exam	25 %
final exam	45 %

Grades **are** curved in that your course grade will reflect your performance relative to the rest of the class rather than relative to some fixed percentage scheme (e.g., 90-80-70-60 etc.).

If you feel that an error in grading has occurred, you have **one week** after the exam or homework is returned to bring it to Dr. Conroy's attention. You should stop by Dr. Conroy's office hours to discuss it.