

MATH 350 2018 Number Theory Syllabus

Instructor

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Grader

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Lectures

Mondays, Wednesdays and Fridays, 1pm – 2pm, in DRL 4C8

Office hours

Karemaker: Wednesdays 2pm – 3pm, in office 4N55 in DRL, and by appointment
Hoisington:

Prerequisites

This course is an introduction to number theory and has no prerequisites. In particular, abstract algebra (Math 370, 371) is *not* required.

Course description

Number theory studies properties of integers. We will discuss several topics, such as congruences and congruence equations, quadratic reciprocity, prime numbers, cryptography and Diophantine equations.

Textbook

“A Friendly Introduction to Number Theory” (classic fourth edition) by Joseph H. Silverman, ISBN 978-0-13-468946-3.

[Click here](#) to purchase your course materials through the Penn bookstore.

Errata and online-chapters can be found on <http://www.math.brown.edu/~jhs/frint.html>.

You may also order the third edition of the book – the above website contains a list of differences between the third and fourth editions.

Exams and projects

There will be an in-class midterm exam on Friday March 2, 1pm – 2pm, and a final exam on Wednesday May 2, 12pm – 2pm.

In the second half of the semester, you will work in pairs on a short project, resulting in a 20 minute presentation at the end of the semester. A list of possible topics will be provided.

Homework

A new homework assignment will be posted on Canvas each Thursday, which is then due at 5pm on the following Thursday.

Late homework will not be marked. Multiple pages of solutions need to be stapled together before handing in.

Grades

The final grade will be based on the midterm (25%), homework grades (30%), project presentation (20%), and the final exam (25%). All grades will be posted on Canvas.

Special assistance

If you need special assistance, please contact SDS at <http://www.vpul.upenn.edu/lrc/sds/>.