

Math 347 Syllabus

Instructor: Mao Li

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HW: We will have weekly HW. HW as well as lecture notes will be posted on Moodle.

Class Meetings: MWF 9:00-9:50 in 217 GREG HALL

Office Hours: MF 12:30pm-13:20pm via zoom

Zoom Link for Office Hours:

<https://illinois.zoom.us/j/85450764125?pwd=K084UURwdU9YU1h5bjc5clIzQWs4Zz09>

Required Text:

Introduction to Abstract Mathematics (Donaldson and Pantano):

<https://www.math.uci.edu/~ndonalds/math13/notes.pdf>.

Course packet available at the Illini Union Bookstore. We will cover all of the topics in this book and will cover a few other topics during the last month of class.

Course Description:

This is an introduction to mathematical language, rigorous mathematical thinking, fundamental mathematical structures, and methods of proof. Topics include logic, set theory, induction, equivalence relations, functions, number theory, cardinality, and convergence.

Grades:

The final grade will be computed based on these percentages:

Midterm Exams(45%): Three in-class tests each covering a section of the course.

Final Exam(20%): This is a three-hour exam, which covers the material of the whole course.

Homework(35%): We will have roughly one homework assignment per week. In a class whose goal is to learn to write proofs this is arguably the most important assignment. You should devote a lot of care to preparing your homework. We encourage group discussion of the exercises but each person should have their own write-up of the solutions/proofs.

The precise function which assigns a letter grade to each percentage will be determined at the end of the course.