

Math250: Foundations of Mathematics, Spring 2020 Course Syllabus

Instructor: Yiran Wang

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- *Office hours:* T, Th: 10:30am–11:30am or by appointment.

Lecture: Mon, Wed, 10am–11:15am at W307C, MSC.

Textbook: *An introduction to abstract mathematics* by Bond and Keane.

Topics: We will cover Chap 1–6 of the textbook. Some specific topics are

- Basic logic – statements, negation, converse, etc.
- Techniques of proof – proof by contradiction, induction; non-constructive proofs, pigeonhole principle, etc.
- Fundamental concepts in mathematics – sets, infinite sets, cardinality; functions; relations.

Course Webpage: <http://www.math.emory.edu/~ywan250/Math250/math250.html>

Please note that course announcements, homework assignments will be posted on the course website.

Grading: Your grade will be determined based on the combined scores from two midterm exams, one final exam, and weekly homework. Grade records will be posted on Canvas. The distribution of weights is

Homework:	25%
Midterm 1:	20%
Midterm 2:	20%
Final:	35%
<hr/> Total:	<hr/> 100%

Homework: Homework assignment will be posted on the course webpage and be due on the dedicated day (usually Wednesdays). Homework will be collected and returned in class. The instructor will very carefully grade 3–5 of the problems per week and check the rest for completeness. NO late homework will be accepted. However, for each HW, one re-write will be allowed and in fact expected, and students will be able to recover up to half of the missed points.

Exams: There are two midterm exams and one final exam for this course. They are scheduled on

Midterm 1: Monday, February 24, in class

Midterm 2: Wednesday, April 1, in class

Final Exam: Tuesday, May 5, 8:00am – 10:30am

Notes, books, or electronic devices may not be used when taking the exams. The final exam is cumulative. Make-up midterm exams will NOT be given. If you miss a midterm exam due to unavoidable, compelling, and well-documented circumstances, the exam will be excused and your other exams will be weighted more heavily. Makeup final exams will be given only in extreme situations, with justification verified by the Office of Undergraduate Education (OUE).

Honor Code: All students must adhere to the provisions of the Honor Code. For more information, see: <http://catalog.college.emory.edu/academic/policies-regulations/honor-code.html>

For the homework, you are allowed to discuss with others, but you must write up your homework solution by yourself. You should understand the solution, and be able to reproduce it yourself.

Student with Disabilities: If you need any extra accommodations, please contact the instructor as soon as possible. Please also find resources from Office of Accessibility Services (OAS): <http://accessibility.emory.edu>