

AMAT 300: INTRODUCTION TO PROOFS SYLLABUS - FALL 2023

Instructor: Prof. Matt Zaremsky

Course meets: TTh 12:00–1:20pm in Humanities 113

Course Website: <http://www.albany.edu/~mz498674/teaching.html>

Email: mzaremsky at albany dot edu

Office hours: W 9:00-11:00am, in my office

1. TEXTBOOK

Richard Hammack, *Book of Proof (Third Edition)* [link].

2. COURSE DESCRIPTION

“Introduction to the methods of higher mathematics, with emphasis on how to read, understand, discover, and write proofs. Topics include basic logic, sets, functions, relations, mathematical induction, countable and uncountable sets, and elementary number theory. This course will require a significant amount of written and oral presentation.”

3. PRE- AND CO-REQUISITES

Prerequisites: Mathematics major; one of AMAT 113, 119, 214 or 218 with a grade of C or better. Corequisite: AMAT 497.

4. HOMEWORK/GRADING

There will be weekly homework. There will be no final exam, because our official final exam slot is two weeks after the last day of class and this doesn't seem fair. Instead there will be three midterm exams. Homework will be posted on the course webpage, due every Thursday. No late work will be accepted. The lowest homework will be dropped. Homework is worth 40% of your grade, and each midterm is 20%.

5. WEEK-TO-WEEK GAMEPLAN

The exact week-to-week plan will evolve with the class, but generally speaking there are 14 sections in the book and 14 weeks of the semester, so we will move through the book roughly one section per week. The exam dates will be decided upon once the class begins, so that everyone can have input, but in general will be somewhat evenly spaced through the semester. No exams are allowed during the last 5 days of the semester, so probably the last midterm will be on the Tuesday before Thanksgiving, and the material covered the week after Thanksgiving will be for fun.

6. POLICIES

See university policies [here] (medical excuse policy), [here] (academic integrity), and the following (absence due to religious observance):

“Instructors must explicitly refer to New York State Education Law (Section 224-A) whereby campuses are required to excuse, without penalty, individual students absent because of religious beliefs, and to provide equivalent opportunities for make-up examinations, study, or work requirements missed because of such absences. Faculty should work directly with students to accommodate religious observances. Students should notify the instructor of record in a timely manner.”