

## AMAT 300: INTRODUCTION TO PROOFS SYLLABUS - FALL 2024

**Instructor:** Prof. Matt Zaremsky

**Course meets:** MW 10:10–11:30pm in Humanities 032

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

**Email:** mzaremsky at albany dot edu

**Office hours:** F 10am-1pm, in my office (and I am very on top of email, if you can't make it to this)

### 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 298.

### 4. HOMEWORK/GRADING

There will be weekly homework and three midterm exams, dates TBD. Homework will be posted on the course webpage every Wednesday, due the following Wednesday. No late work will be accepted. The lowest homework will be dropped. Homework is worth 40% of your grade, and each exam 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 Monday December 2nd, and the material covered after that will be for fun. CHECK YOUR EMAIL: My primary mode of communication is email, I don't use Blackboard or any of that stuff.

### 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.”*