

MATH 631 TOPOLOGY

SYLLABUS

Professor: Dr. Rebecca Goldin

Class: MW 4:30-5:45pm, Exploratory Hall 4106

Office Hours: Wednesdays 3:30-4:20pm and Fridays at 10-10:50am, and by appointment, Exploratory 4214. Please send me a heads-up when you plan to come to office hours on Fridays! I might step out if I don't know in advance. I will occasionally change office hour times when students request different times.

Course Requirements: This course is appropriate for all MS and PhD students in Math, and requires a sophisticated level of proof-writing ability. Students are not expected to have a background in Topology, however there will be a significant learning curve at the beginning for students who have not seen any topology before this course.

Grade: I aim to be transparent with grading! Your grade consists of three things:

- 1) Problem Sets (40%)
- 2) Self-assessed mini preliminary exams (40%)
- 3) Final Exam (20%)

The mini preliminary exams is a new idea. Each of four times in the semester, you will be offered a preliminary-exam style test on a unit within the course. These tests will be taken on your own time but at the Testing Center. They will self-assessed (in class) and graded mostly on participation. The idea of them is to enhance your knowledge of topology within a narrower set of topics, so that you succeed on the topology exam. Most of the grade (75%) on the mini preliminary exam is **participation**; the remaining 25% will be graded rather kindly through your own assessment of your work with a provided rubric during class time.

The final exam consists of the preliminary exam, and possibly some additional questions that will supplement that preliminary exam. All students are required to take the final exam, which occurs **4:30pm-7:15pm on Monday May 11**. The final exam is assessed for the purposes of our class by the instructor of record. The preliminary exam is separately assessed by the topology preliminary exam committee. Your course grade may not correspond with your preliminary exam result; for example, you may get an A in the course and fail the preliminary exam, or pass the preliminary exam but earn a poor grade in the course. A **B or better** in this course satisfies the core course requirement for Topology.

Text and Topics: This course will cover the material listed on the Preliminary Exam Syllabus, which you can find in Blackboard under Organizations>Department of Mathematical Sciences>Preliminary Exams. The textbook for the course is Munkres, *Topology* (2nd Edition). We will cover material from Chapters 1-5 and 9. You can find alternate treatments of many of these topics in Bredon's *Topology* (Chapter 1), and Hatcher's *Algebraic Topology* (Chapter 1), as indicated on the Preliminary Exam Syllabus.

Disability statement: If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Resources at 703.993.2474. All academic accommodations must be arranged through that office.

Honor Code: The University Honor Code is to be followed at all times. Sharing information of any kind about exams or quizzes is prohibited. Any violations will be sent to the Honor Committee and will result in a grade of zero.