Math 344-1: Introduction to topology

Benjamin Antieau

Winter 2026

When: 1400-1450 MWF.

No class: 1/5.

Where: Lunt Hall 102.

Office hours: 1500-1700 W in Lunt Hall 304.

TA: Daniel Mallory.

TA office hours: 1130-1300 F in Locy Hall 209.

Texts: Munkres, *Topology*, 2nd ed.; course notes; Aaron Greicius' Kursobjekte; *The Stacks Project*, Chapter 5.

Coursework: attending lectures, reading, exercises, problem sheets.

Practice exam: Friday 2/6 in class.

Graded exams: none.

Project. Interested students will engage in a collective endeavor to create a database of finite topological spaces.

Goal. Each student will work to become fluent in the language, theorems, proofs, and ideas of point-set topology.

Suggested process. Attend lectures, read, flip through books in the library (514), write notes, solve exercises, write solutions to problem sets, review notes, and devise new questions and examples.

Evaluation. Problem sets will be collected on a weekly basis and there will be an in-class practice exam to allow for working in a timed environment. Daniel Mallory or I will provide feedback on the problem sets. In addition, each student will submit three notes: an introductory note due in class stating why they are in the course and what they hope to get out, a mid-term process note due in class explaining the process they have been using to work, and a final self-evaluation note, due via email by 1700 on Tuesday 3/17. This final one-page document will explain the work they carried out during the quarter and give their assessment of the grade earned. Further guidelines will be given in class.

Department of Mathematics, Northwestern University
antieau@northwestern.edu
DanielMallory2025@u.northwestern.edu