

Math 590: Introduction to Topology
Winter 2022

Time. Mondays, Wednesdays, and Fridays at 12-12:50pm

Location. East Hall B844

Instructor. Linh Truong (tlinh@umich.edu, office: East Hall 4842)

Office hours. Tuesdays 1-2:30pm, Wednesdays 4-5:30pm

Grader. James Walrad (walrad@umich.edu)

Course website. <http://www-personal.umich.edu/~tlinh/winter22/590w22.html>

Prerequisites. Math 295/296 or Math 451, and some group theory (Math 493 – this may be taken concurrently, since we won't be using it until the second half of the course).

Course Description. This course is an introduction to point-set topology and algebraic topology. In the first half of this course, topics will include metric spaces, topological spaces, continuous functions and homeomorphisms, separation axioms, quotient and product topology, compactness, and connectedness. We will then cover elements of algebraic topology including fundamental groups and covering spaces.

Textbook. Topology, 2nd edition, by James Munkres

Homework. Collaboration on homework problems is encouraged, but you should write up the solutions individually. You should acknowledge the assistance of any book, student, or professor. Homework can be handwritten or typeset in \LaTeX , and it should be submitted as a pdf on Canvas by the deadline, usually Fridays. Each student is allowed a total of five late days for homework in the semester. Your lowest homework score will be dropped at the end of the semester.

Exams. One midterm exam will be held during class on **Friday, February 25**. The final exam is projected by the university to be **Tuesday, April 26, 10:30am-12:30pm**.

Grading Scheme. The grades will be determined by:

- Homework 40%
- Midterm 25%
- Final 35%

Accommodation of disabilities. The University of Michigan is committed to providing equal opportunity for participation in all classes, programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Services for Students with Disabilities (SSD) <http://ssd.umich.edu>. Please use SSD's Accommodate system to request that this information be shared with me at the beginning of the term, or at least two weeks before you need an accommodation for an exam or assignment.

Academic integrity. Students are expected to uphold the LSA Community Standards of Academic Integrity.