

**Math 490: Introduction to Topology**  
**Fall 2023 Syllabus**

**Time.** Tuesdays and Thursdays at 1pm-2:30pm

**Location.** East Hall 2866

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

**Office hours.** Mondays 10:30am-12:30pm

**Course Assistant and Grader.** Akash Narayanan (anaray@umich.edu)

**Course website.** <http://www-personal.umich.edu/~tlinh/490f23/>

*Prerequisites.* Math 351 or 451

*Course Description.* This course is an introduction to point-set topology. The course will investigate ideas relating to open sets, compactness, connectedness, and convergence of sequences in metric spaces and abstract topological spaces.

**IBL.** Our course will use the Inquiry-Based Learning (IBL) format. During each class, students will work on worksheet exercises together in small groups and actively participate in group discussions. Through the groupwork, students will strengthen their collaboration and mathematical communication skills.

**Textbook.** This course has no assigned textbook. Students will develop the class material through guided worksheets. Because the goal of this course is self-led discovery, students are asked not to use outside sources.

**Attendance policy.** Attendance in class is required. From the date a student registers for the class, s/he may miss two classes, but each subsequent unexcused absence will result in a penalty of 3% of the final grade. If you must miss a class, please inform your instructor as early as possible. Circumstances such as illness, job interviews, religious observances, certain university-sponsored events, etc. usually constitute “excused” absences and do not typically count toward the two missed classes, provided your instructor is informed in advance when possible.

**Homework.** Collaboration on homework problems is encouraged, but you should write up the solutions individually. Homework can be handwritten or typeset in L<sup>A</sup>T<sub>E</sub>X, and it should be submitted on Gradescope by the deadline, usually Fridays at 8pm.

Students may not consult books or online references for their homework. You may work in groups and discuss homework problems with other students, but all solutions (worksheet and homework) must be written up independently and in your own words. You must put away any notes from discussions with classmates or office hours while you write up your solutions, to ensure you fully understand and can reproduce the arguments.

Each student’s two lowest homework scores will be dropped.

**Quizzes.** There will be regular short quizzes throughout the quarter, usually on Tuesdays. Quizzes will typically be between 10-15 minutes. Students will receive advance notice about each quiz and hints about what it will cover. The quizzes are intended to encourage the class to regularly review the material, to provide practice for the exams, and to give feedback (both to you the student, and to me the teacher) about your progress, early on and in a lower stakes setting than the exams.

Each student's two lowest quiz scores will be dropped.

**Exams.** One midterm exam will be held during class on **Tuesday, October 24, 2023**. The final exam is projected by the university to be **Tuesday, December 12, 2023 at 1:30pm-3:30pm**.

**Grading Scheme.** The grades will be determined by:

- Homework 30%
- Participation 15%
- Quizzes 10%
- Midterm 15%
- Final 30%

**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.