

Topology I, MTG 49303/6346 Fall 2026

SYLLABUS

Instructor: Alex Dranishnikov, dranish@ufl.edu,

Office: Little Hall 424

Office hours: MW7

Lectures: MWF 6th period (12:50-1:40pm) in Little Hall 219)

Textbook: Algebraic Topology by Allen Hatcher,
<https://pi.math.cornell.edu/~hatcher/AT/AT+.pdf>

Class Webpage: <https://people.clas.ufl.edu/dranish/courses/course-1/>

Course Overview: This course is the first part of a two-semester course on Algebraic Topology. In the first few weeks, students will become familiar with CW complexes and their homotopy types. Then the course will focus on the fundamental group and covering spaces, the Seifert-van Kampen theorem, and deck transformations. Most of the course will focus on Homology theory.

Schedule:

- Weeks 1-2: CW complexes and homotopy
- Weeks 3-6: The fundamental group
- Weeks 6-14: Homology

Prerequisites: MTG 4302/5316 (Intro Topology 1) with a minimum grade of C, or permission from the instructor depending on mathematical experience.

Grading:

The score = 20%Presentation + 30%HWQuizzes + 30%MT + 20%Final;

The grade is A if the score > 90, A- if > 85, B+ if > 80, B if > 75, B- if > 70, C+ if > 65,

C if > 55, C- if > 50, D+ if > 45, D if > 40, D- if > 35.

One in class presentation, three quizzes and one in class Midterm,

home-taken Final; no make-ups. Homework

is not graded. Quizzes consist of homework problems.

Extra credit: up to 10 pts for extra presentation in class, up to 5 pts for solving an extra credit problem.

Attendance is strictly recommended.

Academic Policies and Integrity: UF students are bound by

The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code.” On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

The Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. If you have any questions or concerns, please consult with the instructor.

Accommodations: Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center (DRC):

<https://disability.ufl.edu/get-started>.

Please share your accommodation letter with the instructor and discuss your access needs as early as possible in the semester.