

MTG4303/5317 TOPOLOGY

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Text:

"Topology" second edition by James Munkres.

Schedule and Room:

MWF 6 LIT 223

Grading:

20%Presentation+20%HWQuizzes+20%MT+40%Final; A if >85, B+ if > 80, B if > 70, C+ if > 65, C if > 50, D+ if >40, D if >30.

One in class presentation, two quizzes and one in class Midterm based on the Homework, one the home-taken Final; no make-ups.

Home work 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 a * rated homework problem.

Attendance is strictly recommended.

Office Hours:

MW7 LIT 424

Description of the Course:

Spring-2023:

Urysohn Lemma and Tietze Extension Theorem (§33, §35)

Tychonoff Theorem (§37)

Stone-Čech compactification (§38)

Path homotopy and the fundamental group (§51, §52)

Covering spaces (introduction) and the Fundamental group of the circle (§53, §54)

Retractions, fixed points, and the Borsuk-Ulam Theorem (§55, §57)

Deformation retract and homotopy (§58)

Fundamental group of spheres (§59)

Fundamental group of some surfaces (§60)

Algebraic preliminaries to SVK theorem (§67-69)

The SVK- push out, classical and generator/relation versions (§70)

Fundamental group of wedge of circles, the torus, the dunce cap, the projective plane (§71, §73, §74)

Abelianization of fundamental group (first Homology) (§75)

- Homework and Extra Credit

- Solutions to the Q1
- Solutions to the MT
- Solutions to the Q2
- FINAL
- Solutions to the Final

- Announcements:

Current Standing:

- Section 4623
- Section 6171

Statement:

· Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.