Alexander Dranishnikov (https://people.clas.ufl.edu/dranish/)
Department of Mathematics

MTG6347/MAT4930 TOPOLOGY II

MTG6347/MAT4930 Topology II

<u>Text:</u>

"Algebraic Topology" by Allen Hatcher

<u>Schedule and Room:</u>

MWF 6   LIT 217

<u>Grading:</u>

20%Presentation+40%HWQuizzes+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, three quizzes based on the Homework, 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.

<u>Office Hours:</u>

MW7   LIT 424

<u>Description of the Course:</u>

Spring-2024 (Chapter 2-3)

   Cellular Homology

   Mayer-Vietoris Sequence

   Homology with coefficients

   Coefficients Long Exact Sequence

   Tensor and Tor products

   Universal Coefficient Formula (UCF)

   Kunneth Formula

Axiomatic approach to Homology

Cohomology

Universal Coefficient Theorem (UCT)

Cup Product

Cohomology Ring

Kunneth Formula for Cohomology

Orientation and Homology

Cohomology with compact supports

Cap Product

Poincare Duality

Lefschetz Duality

Alexander Duality

· <u>Homework, Presentations, and Extra Credit</u> (https://people.clas.ufl.edu/dranish/files/set24.pdf)

· <u>Solutions to the Q1</u> (https://people.clas.ufl.edu/dranish/files/quiz1S24sol.pdf)
· <u>Solutions to the Q2</u> (https://people.clas.ufl.edu/dranish/files/quiz2S24.pdf)
· <u>Solutions to the Q3</u> (https://people.clas.ufl.edu/dranish/files/quiz3F23sol.pdf)
· <u>FINAL</u> (https://people.clas.ufl.edu/dranish/files/final24S.pdf)
· <u>Solutions to the Final</u> (https://people.clas.ufl.edu/dranish/files/finalS24sol.pdf)

· <u>Announcements:</u>

<u>Current Standing:</u>
· <u>Sections 15186/14583</u> (https://people.clas.ufl.edu/dranish/files/resultsS24.pdf)
<u>Statement:</u>
· 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.

Edit (https://people.clas.ufl.edu/dranish/wp-admin/post.php?post=737&action=edit)

UF UNIVERSITY *of* **FLORIDA** **(http://www.ufl.edu/)**
The Foundation for The Gator Nation