University of Florida

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College *of* Liberal Arts *and* Sciences

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MTG 4303/5317, Elements of/ Introduction to Topology 2

Time and Location

M W F Period 6 (12:50-1:40pm), Little Hall room 223 and online via Zoom

Description

In this course we will learn more advanced topics of general topology, and basic topics and examples in algebraic topology. Topology provides a general setting for studying continuous mathematics, and is a foundation for much of pure and applied mathematics. Algebraic topology translates difficult topological problems into computable algebraic questions. General topology topics include the Urysohn Lemma, Tietze Extension Theorem, Tychonoff theorem, Stone-\v Cech compactification. Algebraic topology topics include the fundamental group, the Seifert-van Kampen theorem, and the classification of surfaces. We will also learn some basic ideas of category theory.

Prerequisites

MTG 4302/5316 with a minimum grade of C, or permission from instructor.

Please contact me if you have any questions and/or requests!

Textbook

Topology, Second Edition, by James R Munkres.

Syllabus