## Andrew Vince Department of Mathematics



# **Topics in Combinatorics**

MAD 7397 – 0017 Spring 2020

Time:	MWF period 5
Place:	Little 207
Phone:	352-294-2339
Office:	438 Little Hall
Email:	avince@ufl.edu



#### References (not required):

Graph Theory by R. Diestel Introduction to Graph Theory by D. West Algebraic Graph Theory by Godsil and Royle

Office Hours:

Monday, Wednesday, Friday period 6 (or by appointment)

Links

course description course evaluation messages

### Topics in Graph Theory – Geometric, Algebraic, Topological

The selected topics illustrate the interplay between graph theory and other branches of mathematics.

Art Gallery Problem Page Rank Geometric Representations of Graphs .....Orthogonal representation - Shannon capacity .....Straight-line embedding .....Thrackles .....Steinitz Theorem .....Rubber band representation .....Representation as a tiling by squares ......Coin representation - Koebe's Theorem, Lipton-Tarjan separator theorem Spectral Graph Theory .....Laplacian of a graph .....Isoperimetric Problems .....Expanders Graph Automorphisms and Homomorphisms . Knots and Graphs

Course Evaluation:

The grade is based on classroom participation and attendance.

#### Messages

#### Welcome to Topics in Combinatorics

Students with disabilities requesting accommodations should first register with the **Disability Resource Center** (352-392-8565) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

The course will be conducted in accordance with the **academic honesty policy**, and policy regarding the use of copyrighted material.

"Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: **attendance policies**.

Information on current UF grading policies for assigning grade points may be found at: grades.

Students are expected to provide feedback on the quality of instruction in this course by completing a course evaluation online via GatorEvals. Guidance on how to give feedback is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluations results are available to students at https://gatorevals.aa.ufl.edu/public-results/.



© 2020 University of Florida, Gainesville, FL 32611; (352) 392-3261. Page Updated: January 11, 2020 This page uses Google Analytics (Google Privacy Policy)