

Description: Topics in enumerative, algebraic, and geometric combinatorics, chosen at instructor's discretion; may include advanced counting techniques, graph theory, combinatorial designs, matroids, and error-correcting codes.

Prerequisite: MAT 226, MAT 316 and MAT 411C with grades greater than or equal to C

Textbook: There will be no required textbooks. Your main reference is the lecture notes. I may ask you to read published scientific papers.

Grading:

- Weights: 40% homework, quizzes; 40% midterms; 20% final.
- Tests: There will be two in-class midterms and a comprehensive final. The exact dates will be announced at least a week before the tests in class and on the course web page. Use of electronic devices or notes are not allowed on the tests. You are responsible for assigned material whether or not it was covered in class. It is important to take notes, and review them after class.
- Quiz: A quiz may be given at any time without announcement.
- Homework: Homework will be assigned and collected regularly. Check the course web page for assignments and due dates. Assignments are due at the beginning of the class. No late homework is accepted but you can turn in homework early. Class attendance is very important. Write out your solutions neatly. Include detailed explanations but be concise. Do not turn in scratch work. The presentation is an important part of your solution. Class participation is important. I may ask you to present something for the class on the board. You are allowed to talk about the homework problems but you have to write your solutions on your own completely from scratch. Check your scores regularly on the grade-sheet posted on the web.

Make up tests will be given only in case of verified medical or other emergency which must be documented. You must make a reasonable effort to notify me as soon as you can, preferably before the missed test is given. The best way to contact me is by email.

All the information on this syllabus are subject to change and any class announcements regarding the syllabus are considered official amendments to it. This syllabus and other information is available on the course web page.