

Math 485: Topics in Combinatorics
Spring 2016 Syllabus

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Office Hours: Mondays and Fridays (when available), Wednesday mornings,
and other times by appointment

Course Content: A variety of topics in combinatorics: Catalan numbers, partially ordered sets, matroids, polytopes, Ehrhart theory, and non-unique factorization. Other topics will be covered by request as time permits. A tentative schedule is posted on the course webpage, and will be updated as frequently as possible to reflect any changes.

Resource Material: No textbook will be required for this course. I will try to provide places for further reading with each new topic in case you are interested and would like to learn more.

Prerequisite: Math 431 or equivalent. Honestly, I am super flexible here. If you would like to join the course and have not already done so, feel free to come talk to me.

Course organization: We will meet for lecture once a week for roughly an hour. The topics will vary, and for the most part will be independent of one another. As such, there will be no need to “catch up” upon missing class. I will also assign small homework sets each week, due the following week (see below). There will be no exams, and no final exam. At the end of the semester, your grade will be determined by (i) your presence and participation in class, and (ii) satisfactory completion of the weekly homework assignments.

Homework: Each week, I will assign one or more problem on the current topic. Typically, these problems will not be any more difficult than the easier required problems from Math 431. At the end of the semester, your homework grade will be computed out of a total of 1 problem per week. If you are unable to complete any problems in a given week (for instance, because of other commitments or a missed class), then a second problem from another week can be used instead. You are also welcome to come talk to me for help on particular problems.

Attendance and Absences: Since this course is optional and has very little work outside of class, attendance is basically required. If you do not wish to attend class, then you should probably not be enrolled. If you cannot attend class one week, just let me know ahead of time. At the end of the semester, as long as you haven't missed *more than 3 class meetings*, your participation grade will not be affected.

A.D.A. Policy Statement: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637.

For additional information, visit <http://disability.tamu.edu>.

Copyright Policy: The handouts used in this course are copyrighted. By “handouts,” I mean all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, in-class materials, review sheets, and additional problems sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission.

Scholastic Dishonesty: *An Aggie Does Not Lie, Cheat, or Steal or Tolerate Those Who Do.* The Aggie Code of Honor will be enforced in this course. For the purpose of this course, cheating will be defined as (but not limited to) access or use of unauthorized material during exams and quizzes, collaboration between students during exams, quizzes or assignments for which group work is not allowed, perusal of another student's work during exams and quizzes, copying other student's work or allowing other students to copy your work on any assignment, quiz or exam, and having unauthorized programs or other information stored on calculators when these calculators are accessible during an exam or quiz. Note: Falsifying documentation is considered scholastic dishonesty and may result in a grade of F* for the course.

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