

Math 485: Topics in Combinatorics
Spring 2016 Lecture Schedule

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Below is a list of the topics we intend to cover, along with a rough time outline. Actual schedule is subject to change without notice. Last updated March 28th, 2016.

Week	Topic
Week 1	Course discussion and potential topics
Week 2	Review: Counting labeled trees
Week 3	Catalan numbers: Introduction
Week 4	Posets: Introduction
Week 5	Posets: The Möbius function
Week 6	Matroids: Definitions and motivating examples
Week 7	<i>Class cancelled</i>
Week 8	Matroids: Identifying common structures
Week 9	<i>Spring break: no class</i>
Week 10	Matroids: The Tutte polynomial
Week 11	Non-unique factorization: Introduction
Week 12	<i>Class cancelled</i>
Week 13	Polytopes: Introduction
Week 14	Polytopes: Ehrhart theory
Week 15	<i>Week before finals: optional class</i>
Extra topics	Numerical monoids: The Frobenius number Polytopes: Extremal face numbers