MATH 6312 - Combinatorics and Graph Theory

MATH 6312 Combinatorics and Graph Theory (3 semester credit hours) This course covers theory and applications of combinatorics and graphs, topics from basic counting principles, principle of inclusion and exclusion, permutation statistics, ordinary and exponential generating functions, composition of integers, integer partitions, Stirling numbers of the first kind, q-analogs of binomial and multinomial coefficients, Euler's formula, Hamilton paths, planar graphs, chromatic and Tutte polynomials and algorithms on networks. Prerequisites: Theoretical Concepts of Calculus and Abstract Algebra I is required or instructor consent required. (3-0) T (2016-02-05 23:34:38)