## MATH 3360: Discrete Mathematics

Analysis topics chosen at the discretion of the instructor from logic, set theory, combinatorics, and graph theory. Methods of enumerative combinatorics: sum, product, and division rules, bijective and recursive techniques, inclusion and exclusion, generating functions, and the finite difference calculus. Advanced topics to be selected from the theory of partitions, Polya theory, designs, and codes, graphs and trees with applications including games of complete information. Combinatorial existence theorems, Ramsey's theorem. Prerequisite: MATH 1431.

Credits 3 Course ID 006347 Requisites

MATH 3360 Prerequisite: MATH 1431

**Semester Offered** 

Spring semester

1 UST Academic Catalog