Course Code: AAM 343
Course Title: COMBINATORIAL ANALYSIS
Lecturer: DONG FENGMING
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Course Description:
1. Application of the general inclusion-exclusion formula to study Stirling numbers of the Second Kind, derangements, Euler \( \phi \)-function, etc.

2. Application of the generating functions and exponential generating functions to study problems on distributions of objects, partitions of integers, etc.

3. Application of recurrence relations to study sequences. For example, we will study how to find an expression for the general term \( a_n \), if \( a_0=2 \), \( a_1=3 \) and \( a_n=3a_{n-1}-2a_{n-2} \) for all \( n \geq 2 \).

References:

Lecture Note: Will be provided.

Assessment Mode: Three tests and final exam.