Course Title: Modern Algebra II

Textbook: Contemporary Abstract Algebra by J. Gallian

Description: Finite and finitely generated Abelian groups. Solvable groups. Nilpotent groups. Sylow theorems. Factorization in integral domains. Principal ideal domains. Fields. Field extensions. Finite fields. An introduction to Galois theory.

Course Plan:

Topics	Weeks
Finite and finitely generated Abelian groups	2
Solvable groups and nilpotent groups	3
Sylow theorems	1
Factorization in integral domains and principal ideal domains	4
Fields, field extensions, finite fields	4
An introduction to Galois theory	1

Assessment
- **Exam 1:** 22%
- **Exam 2:** 22%
- **Homework:** 20%
- **Final Exam:** 36%

Attendance: Six unexcused absences will result in a DN grade.

Academic Integrity: All KFUPM ethics policies apply in this course.