

King Fahd University of Petroleum & Minerals
Department of Mathematics & Statistics
Math 423 Syllabus
First Semester 2019-20 (191)
Instructor: Dr. A. Laradji

Title: Modern Algebra II

Textbook: Contemporary Abstract Algebra, by J.A. Gallian, 8th edition.

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.

Assessment:

- Exam 1: 22%
 - Exam 2: 22%
 - Homework: 20%
 - Final Exam: 36%
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Attendance and Academic Integrity: KFUPM policy on attendance and ethics will be enforced.

Course Plan:

Topics	Number of 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