



Course No.	Course Title	No. of Units			Pre-requisites
		Th.	Pr.	Credit	
MATH 343	Abstract Algebra II	3	-	3	MATH 342

Course Objectives:

- The student will improve his logical thinking and learn the techniques of the proof of theorems.
- As a result he will be equipped with the methods of solved exercises.
- It is expected that the students may apply the techniques learnt in this course to apply of the theorems of group theory.

Course Description:

Direct product, Finitely generated abelian groups, Group action, Theory of p-groups, Sylow theorems and its applications, Ring, Subrings, Factor rings, ring homomorphism, Integral domain, Division rings, Fields, Polynomial rings, Irreducible polynomials rings, Unique factorization domain, Fields theory and quotient fields.

Main Text Book:

- A First Course in Abstract Algebra, by John B. Fraleigh, 7<sup>th</sup> edition, Addison-Wesley Publishing Company, 2002.

Subsidiary Books:

- Modern Algebra: An Introduction, by John R. Durbin, John Wiley & Sons, Inc. 4<sup>th</sup> edition 2000.