

**Ankara University
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Syllabus

Code and name of the course	MTH311 ALGEBRA I
Instructor(s)	Elif TAN
Level	Undergraduate
Course Duration	14 weeks
Course description	Basic concepts of integers, divisibility, prime factors, congruence of integer, equivalence classes and solutions of equations, groups and subgroups, cyclic groups, isomorphisms of groups, finite permutation groups, Cayley's Theorem, normal subgroups, quotient groups and homomorphisms, direct sum of groups, some properties of finite abelian groups and Sylow Theorems.
Course aims & Objectives	Understand the basic concepts of group theory Determine whether given set is a group by using operation tables Determines whether given two groups are isomorphic. Grasps a group is written as a direct sums of subgroups.
Language of Instruction	English
Prerequisites	-
Recommended Sources	1) J. B. Fraleigh, A First Course In Abstract Algebra, Addison Wesley. (7th Edition) 2) D. S. Malik, J. M. Mordeson and M. K. Sen, Fundamentals of Abstract Algebra, Mc Graw Hill, 1997.
Course credit	3 credits
Laboratuvar	-
Others-1	-