Syllabus

Code and name of the course	**MTH312 ALGEBRA II**
Instructor(s)	Elif TAN
Level	Undergraduate
Course Duration	14 weeks
Course description	Rings, subrings, integral domains and fields,the field of quotients of an integral domain, ordered integral domains, ideals and qoutient rings, ring homomorphisms, the characteristic of a ring, maximal and prime ideals, polynomial rings, divisibility for polynomials, , factorization over polynomial rings, zeros of polynomials, algebraic extensions of a field.
Course aims & Objectives	Understand the basic concepts of ring theory Understand the concept of ideals and construct the factor groups Understand the statement of the Division Algorithm for polynomials Learn factorization in polynomial rings
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	-