Code and Name of Course	MTK 162-01-02 Abstract Mathematics II
Type of Course	Compulsory
Credit of Course	3 0 3
ECTS Credit	5
Course Lectures	Assoc.Prof. Feride Kuzucuoğlu, Assoc.Prof. Nuri Çimen
Pre-requisites	-
Course Length	1 Semester , 3 hours
Course Content	- Order preserving functions, - lattices, - well ordered sets, - axiom of choice and its equivalances, - countable and uncountable sets
Course Objectives: (Learning outlines)	At the end of this course a student: I. defines order preserving function and order isomorphism, proves basic propositions about maps which preserve ordering, II. defines lattice,sublattice and complete lattice, gives some examples to the lattice, III. defines well ordered set, initial segment and solves some problems about well ordered set and initial segment, IV. learns statements of axiom of choice, Housdorff Maximal Principle, Zorn's Lemma and well ordering principle which are equivalent and proves some of the equivalances, V. defines finite, infinite, countable set and decides whether the given set countable or not.
References	. Orhan Özer, Doğan Çoker, Kenan Taş, Soyut Matematik,İzgiYayınevi, Ankara, 1998. • Other related lecture notes.
Main Teaching Methods	Lecturing, Discussing , Recitation
Assessment Methods	Midterms (50%), Final (50%).
Language of Course	English