

NUMBER THEORY

1	Course Title:	NUMBER THEORY	
2	Course Code:	MAT3020	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	3	
6	Semester:	6	
7	ECTS Credits Allocated:	5.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	2.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. İSMAİL NACİ CANGÜL	
15	Course Lecturers:	Yrd. Doç. Dr. Musa DEMİRCİ, Yrd. Doç. Dr. Hacer ÖZDEN	
16	Contact information of the Course Coordinator:	cangul@uludag.edu.tr, 0224 2941756, Fen-Edebiyat Fakültesi, Matematik Bölümü, 16059, Görükle / Bursa	
17	Website:	http://www.ismailnacicangul.com/	
18	Objective of the Course:	To give definitions and detailed properties of algebraic structures; especially groups, rings and fields, types of groups, transformations between groups, quotient group together with the origins of the notions.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	Knows algebraic structures and their properties.
		2	Can use the transformations between algebraic structures.
		3	Has an idea about at least one of the computer programmes in group theory.
		4	Can realise applications of algebraic structures.
		5	Knows geometric properties of groups.
		6	Knows the corresponding English meanings of the main notions.
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	Introduction, groups	Examples of groups	
2	Group examples and basic properties	Examples of binary operations	
3	Subgroups	Examples of subgroups	
4	Normal subgroups	Examples of normal subgroups	

ÖK5	0	3	0	0	3	0	2	3	0	0	0	0	0	0	0	0
ÖK6	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low		2 low			3 Medium			4 High			5 Very High				