GALOIS THEORY									
1	Course Title:	GALOIS THEORY							
2	Course Code:	MAT4061							
3	Type of Course:	Optional							
4	Level of Course:	First Cycle							
5	Year of Study:	4							
6	Semester:	7							
7	ECTS Credits Allocated:	5.00							
8	Theoretical (hour/week):	3.00							
9	Practice (hour/week):	0.00							
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, 0 224 2941657, Fen-Edebiyat Fakültesi Matematik Bölümü							
17	Website:								
18	Objective of the Course:	The aim of this course is to give students some basic concepts of Galois Theory, to teach the techniques related to the solutions of polynomial equations.							
19	Contribution of the Course to Professional Development:								
20	Learning Outcomes:								
		1	to be able to solve the 2nd, 3rd and 4th order polynomial equations						
		2	to be able to state the fundamental theorem of Galois theory						
		3	to be able to state the relations between groups, rings and polynomials						
		4 to be able to classify domains, fields, subrings, subfig and ideals and give examples of those							
		5	to let the students know the differences between rings, fields and domains						
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		7							
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		9 10							
21	Course Content:								
21		Co	ourse Content:						
Week	Theoretical		Practice						
1	Rings								
2	Integral Domains and Fields								
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4     Quotient rings       5     Polinomial rings       6     Prime and maximal ideals       7     Irreducible polinomials										
6 Prime and maximal ideals										
7 Irreducible polinomials										
8 The general solution methods fort the third and fourth order equations										
9 Field extensions and finite fields										
10 Midterm exam and general review										
11 Galois group										
12 The roots of the unit and fields extensions										
13 The fundamental theorem Galois Theory										
14 Quadratic, cubic and quartic Galois groups										
22Textbooks, References and/or Other Materials:J. ROTMAN, Galois Theory, Springer, 1998; I. N. CANGÜL, Galois Theory Lecture Notes										
23 Assesment										
TERM LEARNING ACTIVITIES NUMBE REIGHT	WEIGHT									
Midterm Exam 1 40.00	40.00									
Quiz 0 0.00										
Activites Number Duration (hour) To	Total Work Load (hour)									
Theoretical Contribution of Term (Year) Learning Activities to 40.00 3.00 42.	2.00									
	0.00									
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ÖK5	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	
LO: Learning Objectives PQ: Program Qualifications																	
Contrib ution Level:					2 low		3	3 Medium			4 High			5 Very High			