RING THEORY I

1	Course Title:	RING THEORY I	
2	Course Code:	MAT5119	
3	Type of Course:	Optional	
4	Level of Course:	Third Cycle	
5	Year of Study:	1	
6	Semester:	1	
7	ECTS Credits Allocated:	6.00	
8	Theoretical (hour/week):	3.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:		
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. MUSA DEMİRCİ	
15	Course Lecturers:	Prof. Dr. İsmail Naci Cangül, Prof. Dr. Gökhan Soydan, Prof. Dr. Betül Gezer, Doç. Dr. Yeliz Kara Şen,..	
16	Contact information of the Course Coordinator:	Doç. Dr. Musa Demirci Fen-Edebiyat Fakültesi Matematik Bölümü Görükle / BURSA	
17	Website:		
18	Objective of the Course:	The Students are learned some basic information about Algebraic structure during undergraduate education. One of These algebraic structures which is Ring will be discussed and studied specifically.	
19	Contribution of the Course to Professional Development:	To have advanced knowledge about rings.	
20	Learning Outcomes:		
		1	Knows the notion of Rings
		2	Can operate on Rings
		3	Knows notions which Subring, Ideal and Quotient Ring.
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21	Course Content:		

Course Content:

Week	Theoretical	Practice
1	Introduction to Rings. Elementary knowledge about Rings	
2	Some important Rings which are Boolean,Regular and etc.	
3	Subrings and Subfields.Ideals and Quotient Rings	
4	Homomorphisms and Isomorphisms.	

5	Exercises about Rings and Subrings.	
6	Subrings, Ideals and Homomorphisms	
7	Ring embeddings. Theorems of Isomorhpism	
8	Integral domain, Quoitent Field of Integral Domain.	
9	Polinomial Rings.	
10	Exercises about Homomorphisms, Isomorphisms and Integral domain.	
11	Direct sum of Rings.	
12	Polinomial Rings and F[x] Rings.	
13	Euclidean Domains and Ideals.	
14	General exercises about Rings.	

22	Textbooks, References and/or Other Materials:	CEBİR, Ali Osman ASAR, Ahmet ARIKAN, Aynur ARIKAN,2009 Eflatun, ISBN: 978-605-4160-22-8 FUNDAMENTALS OF ABSTRACT ALGEBRA, D., S., MALIK, John M., MORDESAN, M., K., SEN, 1997 Mc Graw-Hill, ISBN: 0-07-040035-0
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	0	0.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	100.00
Total	1	100.00
Contribution of Term (Year) Learning Activities to Success Grade		0.00
Contribution of Final Exam to Success Grade		100.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		Summative assessment (Final Exam)

24 ECTS / WORK LOAD TABLE

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	4.00	56.00
Homeworks	6	6.00	36.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	0	0.00	0.00
Others	4	6.00	24.00
Final Exams	1	20.00	20.00
Total Work Load			178.00
Total work load/ 30 hr			5.93
ECTS Credit of the Course			6.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	**PQ2**	**PQ3**	**PQ4**	**PQ5**	**PQ6**	**PQ7**	**PQ8**	**PQ9**	**PQ10**	**PQ11**	**PQ12**	**PQ13**	**PQ14**	**PQ15**	**PQ16**
ÖK1	4	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	5	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	5	4	5	0	0	0	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**				