

DISCRETE MATHEMATICS

1	Course Title:	DISCRETE MATHEMATICS	
2	Course Code:	BMB2011	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	2	
6	Semester:	3	
7	ECTS Credits Allocated:	7.00	
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:	Doç. Dr. GIYASETTİN ÖZCAN	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	Bilgisayar Müh. Bölüm Binası, 1. kat, oda 107 Tel.:+90 (224) 294 2792 email: gozcan at uludag.edu.tr	
17	Website:		
18	Objective of the Course:	Discrete mathematical knowledge is required in efficient algorithm design and analysis. This course provides discrete mathematical knowledge, that is used in Computer Science.	
19	Contribution of the Course to Professional Development:	Preparation of mathematical background in Computer Science	
20	Learning Outcomes:		
		1	Learn logic and proof methods
		2	Learn induction and recursion methods
		3	Learns Advanced counting earners
		4	Gain preliminary knowledge on concepts of relationship and chart
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	Introduction		
2	Logic		
3	Proofs		
4	Sets		
5	Functions		

6	Algorithms	
7	Integers	
8	General review ve evaluation	
9	Induction	
10	Recursion	
11	Counting	
12	Probability	
13	Advanced counting	
14	Relations	

22	Textbooks, References and/or Other Materials:	Discrete mathematics and its applications, Kenneth H. Rosen, 7th edition
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23	Assesment	
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TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	100.00

Contribution of Term (Year) Learning Activities to Success Grade	40.00
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Activites	Number	Duration (hour)	Total Work Load (hour)
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Theoretical Measurement and Evaluation Techniques Used in the	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preparation	0	0.00	0.00

24 ECTS/ WORK LOAD TABLE			
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	70.00	70.00
Others	0	0.00	0.00
Final Exams	1	98.00	98.00
Total Work Load			280.00
Total work load/ 30 hr			7.00
ECTS Credit of the Course			7.00

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	5	5	4	3	3	2	5	1	1	1	1	1	0	0	0	0
ÖK2	5	5	4	3	3	2	5	1	1	1	1	1	0	0	0	0
ÖK3	5	5	4	3	3	2	5	1	1	1	1	1	0	0	0	0
ÖK4	5	5	4	3	3	2	5	1	1	1	1	1	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	1 very low	2 low	3 Medium	4 High	5 Very High
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