

MATHEMATICS-I

1	Course Title:	MATHEMATICS-I
2	Course Code:	MAT1501
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	1
6	Semester:	1
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. Hüseyin Ovalıoğlu
15	Course Lecturers:	Doç. Dr. Hüseyin OVALIOĞLU
16	Contact information of the Course Coordinator:	ovalı@uludag.edu.tr E-mail: ovalı@uludag.edu.tr İş Tel: 0 224 29 41 691 Adres: Bursa Uludağ Üniversitesi Fen Edebiyat Fakültesi Fizik Bölümü, 16059 Görükle Kampüsü BURSA
17	Website:	
18	Objective of the Course:	To give basic mathematical knowledge to students, to use this information to solve business problems and to gain the ability to evaluate solutions.
19	Contribution of the Course to Professional Development:	To give basic mathematical knowledge to students, to use this information to solve business problems and to gain the ability to evaluate solutions.
20	Learning Outcomes:	
	1	To know basic mathematical concepts;
	2	To understand the importance of mathematics for business;
	3	To be able to define business problems with equations;
	4	Being able to express mathematically concepts such as income, cost and profit;
	5	To be able to make simple and compound interest calculations; To be able to make simple and compound interest calculations;
	6	To be able to analyze the details of the mathematical model by methods such as limit and derivative;
	7	To be able to synthesize the obtained data;
	8	To be able to evaluate the results and established models;
	9	
	10	
21	Course Content:	

	Course Content:				
Week	Theoretical		Practice		
1	Drawing linear equations, linear functions and graphs				
2	Creating linear inequalities and graphs				
3	Cost, income and profit functions, breakeven point analysis				
4	Polynomial nonlinear functions				
5	Logarithm, exponential and logarithmic functions				
6	Operation applications of nonlinear functions				
7	Arrays and series (Midterm exam)				
8	Interest calculations and applications				
9	Limit and continuity				
10	Definition of derivative, concept of rate of change and rules of derivative				
11					
12	Derivative and continuity, differential, indefinite shapes and L'hospital rule				
13	Increasing and decreasing functions, determination of extremum and turning points, drawing curve				
14	Maximum profit, minimum cost calculations,				
Activites			Number	Duration (hour)	Total Work Load (hour)
Theoretical	Materials:		Mathematics in Social Sciences, Ezgi Books, 2010. 2. Mustafa Sevükderekin, Zehra Baskaya	12.00	12.00
Practicals/Labs			0	0.00	0.00
Self study and preperation			Practices, Dora Publishing, Bursa, 2010. 3. Bulent Kobu, Business Mathematics, Beta Publishing House, Istanbul	70.00	70.00
Homeworks			0	0.00	0.00
Projects			Analysis, Ekin Bookstore, Bursa, 1993	0.00	0.00
Field Studies			0	0.00	0.00
TERM LEARNING ACTIVITIES		NUMBER	WEIGHT		
Midterm exams		1	20.00		20.00
Others		0	0.00		0.00
Final Exams		0	0.00	25.00	25.00
Total Work Load					177.00
Total work load/ 30 hr		1	60.00		5.23
ECTS Credit of the Course					5.00
Contribution of Term (Year) Learning Activities to Success Grade			40.00		
Contribution of Final Exam to Success Grade			60.00		
Total			100.00		
Measurement and Evaluation Techniques Used in the Course			One midterm and one final exam will be held to understand how much the information about this course has been learned.		
24	ECTS / WORK LOAD TABLE				

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	4	4	4	3	3	3	3	5	5	5	0	0	0	0
ÖK2	5	5	5	5	3	3	3	3	4	4	4	4	0	0	0	0
ÖK3	4	3	5	4	4	3	4	5	3	5	3	4	0	0	0	0
ÖK4	5	3	5	3	5	4	5	4	3	4	5	3	0	0	0	0
ÖK5	5	3	4	5	3	4	5	3	5	5	3	3	0	0	0	0
ÖK6	3	5	4	5	3	4	5	3	5	5	3	3	0	0	0	0
ÖK7	4	5	3	4	5	3	4	3	5	4	4	4	0	0	0	0
ÖK8	5	3	4	5	4	4	5	3	3	3	3	5	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low		2 low			3 Medium			4 High			5 Very High				