		ANA						
1	Course Title:	ANALYSIS III						
2	Course Code:	İMT2007						
3	Type of Course:	Compulsory						
4	Level of Course:	First Cycle						
5	Year of Study:	2						
6	Semester:	3						
7	ECTS Credits Allocated:	9.00						
8	Theoretical (hour/week):	4.00						
9	Practice (hour/week):	2.00						
10	Laboratory (hour/week):	0						
11	Prerequisites:							
12	Language:	Turkish						
13	Mode of Delivery:	Face to face						
14	Course Coordinator:	Dr. Ögr. Üyesi BAHTİYAR BAYRAKTAR						
15	Course Lecturers:	y.Doç.Dr	. bahtiyar bayraktar					
16	Contact information of the Course Coordinator:	E-mail: bbayraktar@uludag.edu.tr, İş Tel: +90(224) 294 22 98. Adres: UÜ, Eğitim Fakültesi, İlköğretim Bölümü, Matematik Eğitimi Anabilim Dalı, 16059 Görükle / BURSA						
17	Website:							
18	Objective of the Course:	To gain the ability to examine and interpret the basic mathematical concepts and the theoretical structure of multi-variable functions.						
19	Contribution of the Course to Professional Development:							
20	Learning Outcomes:							
		1	Recognize highly variable functions, find definition regions, draw graphs.					
		2	To learn how to define limit concepts for univariate functions for multivariable functions.					
		3	To learn how to define concepts such as continuity for univariate functions for multivariable functions.					
		4	To learn how concepts such as derivatives for univariate functions are defined for multivariable functions.					
		5	Will be able to find the limits of multivariable functions.					
		6	Will be able to examine the continuity of multivariable functions.					
		7	They will be able to identify partial derivatives.					
		8	They will have knowledge about partial derivative applications.					
		9 Will be able to learn and calculate multiple integrals.						
		10 Applications of multiple integrals: area, volume, etc. applications.						
21	Course Content:							
		Co	urse Content:					
Week	Theoretical		Practice					

1	Multivariable function concept, function definition and value sets, graphical d	on rawing.							
2	Multivariable function concept, function definition and value sets, graphical d Limit concept in two variable function Concept of limit and applications in two variable functions, concept of continu	on rawing. Is. wo uity.							
3	Concept of limit and applications in two variable functions, concept of continu- Limit concept in two variable function Concept of limit and applications in two variable functions, concept of continu-	wo uity. IS. wo uity.							
4	Concept of limit and applications in two variable functions, concept of continue Partial derivative in two variable funce Partial derivative in two variable funce differential concept, chain rule.	wo uity. tions. tions,							
5	Partial derivative in two variable func differential concept, chain rule. Directional derivative in two variable functions, gradient.	tions,							
6	Directional derivative in two variable functions, gradient. Local extremum values ??and applic	ations.							
7	Midterm								
8	Midterm Absolute extremum values ??and								
Activit	ies		Number	Duration (hour)	Total Work Load (hour)				
Theore	applications, Lagrange multipliers.		14	4.00	56.00				
Practic	als/Labs		14	2.00	28.00				
Self stu	ayvanla va bipterariah concept.		14	13.00	182.00				
Homew	vorks		0	0.00	0.00				
Project	Volume calculations with two-layer in	itegral	0	0.00	0.00				
Field S	tudies		0	0.00	0.00				
Midtern	Tere calculations with two-rold integr	ai. itearal	1	2.00	2.00				
Others			0	0.00	0.00				
Final E	Tamge-fold integral concept.		1	2.00	2.00				
Total W	Vork Load				270.00				
Total w	ork load/ 30 hr				9.00				
ECTS	Credit of the Course		TT. 2. T. DUSKI. 1900.		9.00				
			 Prof Dr. Mustafa BAYRAKTAR Analize giriş I, II. 2. Baskı, 2008. Prof. Dr. Mustafa BALCI, Analiz 1,2. 7. Baskı, 2008. Doç. Dr. Ahmet TEKCAN, İleri Analiz. DORA 2010. 						
23	Assesment								
TERM L	EARNING ACTIVITIES	NUMBE R	WEIGHT						
Midtern	n Exam	1	40.00						
Quiz		0	0.00						
Home	work-project	0	0.00						
Final E	xam	1	60.00						
Total		2	100.00						

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	

24 ECTS / WORK LOAD TABLE

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16
ÖK1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib ution Level:	Contrib 1 very low ution Level:			2 Iow		3 Medium			4 High			5 Very High				