		ANA	LYSIS IV							
1	Course Title:	ANALYS	SIS IV							
2	Course Code:	MAT200	2							
3	Type of Course:	Compuls	ory							
4	Level of Course:	First Cyc	le							
5	Year of Study:	2								
6	Semester:	4								
7	ECTS Credits Allocated:	10.00								
8	Theoretical (hour/week):	4.00								
9	Practice (hour/week):	2.00								
10	Laboratory (hour/week):	0								
11	Prerequisites:	None								
12	Language:	Turkish								
13	Mode of Delivery:	Face to f	ace							
14	Course Coordinator:	Dr. Ögr.	Üyesi ELİF YAŞAR							
15	Course Lecturers:	Analiz ve	e Fonksiyonlar Teorisi bilim dalı öğretim üyeleri							
16	Contact information of the Course Coordinator:	elifyasar U.Ü. Fer	@uludag.edu.tr, 0(224) 2942872, -Ed. Fak. Matematik Bölümü, Görükle/BURSA.							
17	Website:									
18	Objective of the Course:	to learn o surface i	definitions, properties and calculations of multiple, line and ntegrals in Euclidean spaces.							
19	Contribution of the Course to Professional Development:									
20	Learning Outcomes:									
		1	Definition and calculation of double integrals.							
		2	Change of variables and polar coordinates in double integrals							
		3	Calculation of double improrer integrals							
		4	Definition and calculation of triple integrals.							
		5	Calculations of triple integrals in cylindrical and spherical coordinates							
		6	Line integrals of scalar and vector functions							
		7	Definitions of independence of path and gradien and planar Green and Divergence theorems							
		8	Surface integrals, Divergence and Stokes Theorems.							
		9								
		10								
21 Course Content:										
		Co	ourse Content:							
Week	Theoretical		Practice							
1	Definition and calculation of double in	ntegrals.	Solutions of exercises of related subject							
2	Change of variables and polar coord double integrals.	inates in	Solutions of exercises of related subject							
3	Improrer double integrals.		Solutions of exercises of related subject							
4	Definition and calculation of triple inte	egrals.	Solutions of exercises of related subject							

5	Triple coordii	Triple integrals in cylindrical and spherical coordinates.									Solutions of exercises of related subject								
6	Line in	Line integrals of scalar functions.									Solutions of exercises of related subject								
7	Line in	Line integrals of vector functions.									Solutions of exercises of related subject								
8	Definit gradie	ion n	s of ir	ndepe	ndenc	e of pa	ath an	d	Sc	Solutions of exercises of related subject									
9	Planar theore	Gr m	een t	heore	m and	d Diver	gence		So	Solutions of exercises of related subject									
10	Definit norma	ion I .	s of s	urface	e, tang	gent pla	ane ar	nd	So	Solutions of exercises of related subject									
11	Area o	urface	ə.					Sc	lutions	of exe	ercises	of relate	ed subj	ect					
12	Surfac	ntegra	als.					Sc	Solutions of exercises of related subject										
13	Diever	gei	nce a	nd Sto	okes T	heorer	ns		So	lutions	s of exe	ercises	of relate	ed subj	ect				
14	Summ	ary	1						So	lutions	s of exe	ercises	of relate	ed subj	ject				
22	Textbooks, References and/or Other Materials:									 M., BAYRAKTAR, Analiz, Nobel Yay. 2010. B. MUSAYEV, K. KOCA, N. MUSTAFAYEV, Analiz IV, Seçkin Yayınevi 2006. M. BALCI, Matematik Analiz II, Balcı Yayınları, 2005. J.E.MARSDEN, A.J.TROMBA, Vector Calculus, Freeman company, 2003. S. LANG, Calculus of Several Variables, 3rd ed., Springer- Verlag, New York, 1987. 									
23	Asses	me	nt																
TERM LEARNING ACTIVITIES NUMBE							<u> </u>	<u>EIGHT</u> Numb	er		Dura	tion (hour)	Total Work Load (hour)					
HOPPE	₩69k-pr	oje	ct				0		0.0	18			4.00			56.00			
Practic	als/Lab	s							ŀ	14			2.00		:	28.00			
\$e l∱astu	Setastudy and preperation 3									1010400				10.00			140.00		
Homew	vorks								(0				0.00			0.00		
PHGEE	Geess Grade									0				0.00					
Field S	Id Studies										0					0.00			
17/bi¢taterr	idaerm exams									1020.00			15.00	15.00			30.00		
Others	thers										2			15.00			30.00		
EWAISE	Mans										1				15.00				
I otal W	otal work Load															299.00			
Total w										9.97						9.97			
										10.00									
25	25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																		
	PG	21	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16		
ÖK1	2		4	1	3	4	1	1	4	4	1	0	0	0	0	0	0		
ÖK2	1		4	1	3	4	1	4	4	3	1	0	0	0	0	0	0		
ÖK3	1		3	1	3	4	1	1	4	3	1	0	0	0	0	0	0		
		ļ																	

ÖK5	1	4	1	3	4	2	1	4	3	1	0	0	0	0	0	0
ÖK6	1	4	1	3	4	1	1	4	3	1	0	0	0	0	0	0
ÖK7	1	4	1	3	4	1	2	4	3	0	0	0	0	0	0	0
ÖK8	1	4	1	3	4	1	1	4	3	1	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib 1 very low ution Level:			2 low		3 Medium			4 High			5 Very High					