DIFFERENTIAL GEUATIONS II											
1	Course Title:	DIFFERI	ENTIAL GEUATIONS II								
2	Course Code:	MAT201	6								
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:	4.00									
8	Theoretical (hour/week):	2.00									
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:	Prof. Dr. MEHMET ÇAĞLIYAN									
15	Course Lecturers:	Yrd.Doç.Dr.Setenay DOĞAN Yrd.Doç.Dr.Nisa ÇELİK Yrd.Doç.Dr.Sezai HIZLIYEL Yrd.Doç.Dr.Emrullah YAŞAR									
16	Contact information of the Course Coordinator:	caglayan@uludag.edu.tr 0-224-2941752 U.Ü. Fen-Ed. Fak. Mat. Böl. Görükle Yerleşkesi Nilüfer/BURSA									
17	Website:										
18	Objective of the Course:	To obtain the solutions of differential equations occuring in mathematics, physics and engineering.									
19	Contribution of the Course to Professional Development:										
20	Learning Outcomes:										
		1	Knows the modelling of some events as differential equation.								
		2	Knows the methods of solutions of linear differential equation with constant coefficient.								
		3	Knows the methods of solutions of linear differential equation with variable coefficient.								
		4	Knows the methods of solutions of nonlinear differential equations of higher order.								
		5	Knows series solutions of differential equations.								
		6									
		7									
		8									
		9									
		10									
21	Course Content:	Course Content:									
		Co	ourse Content:								
Week			Practice								
1	nTH order linear homogenous differe equations with constant coefficient.	ential	Problem solving								

2	the method of undetermined coefficients for nth- order linear non-homogenous differential equations with constant coefficient.									Problem solving										
3	Inver	nverse operator method.								Problem solving										
4	Appli equa	Applications of higher order linear differential equation.								Problem solving										
5	Linea coeff	Linear differential equations with variable coefficients. Factorization of operator.									Problem solving									
6	Redu	uctio	n of o	rder					Pro	Problem solving										
7	Varia	ation	of pa	ramete	ers.				Pro	Problem solving										
8	Midte	ا المعاملة/Aidterm Exam,General Review									Problem solving									
9	Cauc	:hy-E	Euler	differe	ntial e	equation	ns.		Pro	blem	solving	I								
10	n th-	orde	er non	linear	differ	ential e	quatio	ons.	Pro	blem	solving	I								
11	Spec	ial e	quatio	ons					Pro	blem	solving	I								
12	Redu	uctio	n of o	rder of	f diffe	rential	equati	ons.	Pro	blem	solving	I								
13	Powe point	Power series solutions about an ordinary point.									solving	l								
14	Regu Frobe	ular s eniu:	singula s.	ar poir	nts an	d the m	nethoo	d of	Pro	Problem solving										
22	Textbooks, References and/or OtherAdi Diferensiyel IMaterials:Prof. Mehmet ÇA										Denkle AĞLIY	enklemler SLIYAN								
Activites							٦	Numb	er		Duration (hour)			Total Work Load (hour)						
								: Wé	ÍGНТ			2.00		28.00						
Practicals/Labs								1	4			2.00			28.00					
Self stu	Self study and preperation								44	40			2.00			28.00				
Homeworks								C	Ĵ			0.00			0.00					
Fome v	Fore work-project U								02	0			0.00			0.00				
Field Studies								C)			0.00			0.00					
Midterm exams 2								10(100.00				11.00			11.00				
Others	Others								1	14				1.00			14.00			
Final Exams									00			11.00			11.00					
Total Work Load														120.00						
Tŏtãl work load/ 30 hr									5.00					4.00						
ECTS Credit of the Course									4.00											
24	ECT	'S /	WO	RK L	OAD	TAB	LE													
25	25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																			
	P	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16			
ÖK1	4		3	1	2	4	1	5	4	2	1	0	0	0	0	0	0			
ÖK2	2	2	4	1	2	4	1	3	4	2	1	0	0	0	0	0	0			
ÖK3	2	2	4	1	2	4	1	2	3	2	1	0	0	0	0	0	0			
ÖK4	3	3	3	1	3	4	1	4	3	2	1	0	0	0	0	0	0			

ÖK5	3	3	1	2	4	1	2	4	1	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					