CALCULUS III (DIFFERENTIAL EQUATIONS)									
1	Course Title:	CALCUL	US III (DIFFERENTIAL EQUATIONS)						
2	Course Code:	MAT208	3						
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:	6.00							
8	Theoretical (hour/week):	3.00							
9	Practice (hour/week):	2.00							
10	Laboratory (hour/week):	0							
11	Prerequisites:	-							
12	Language:	Turkish							
13	Mode of Delivery:	Face to f	ace						
14	Course Coordinator:	Dr. Ögr.	Üyesi SETENAY DOĞAN						
15	Course Lecturers:	Dr. Öğre	tim Üyesi Setenay DOĞAN						
16	Contact information of the Course Coordinator:	e-posta:setenay@uludag.edu.tr Telefon:0224 2941768 Adres:Bursa Uludağ Üniversitesi Fen-Edb. Fak. Mat. Böl. B102 Görükle Bursa							
17	Website:								
18	Objective of the Course:	Mathematics, physics and engineering problems to teach the types of analytic solutions of differential equations is used to obtain							
19	Contribution of the Course to Professional Development:	Learn how to apply Dfferential Equations to Engineeringproblems in their professional life and work and how to reach a solution.							
20	Learning Outcomes:								
		1	Knows to solve differential equations						
		2	Learn basic mathematical formulas, and use the best						
		3	Learns the analytical solution						
		4	Knows to apply differential equations to mathematics and physics						
		5							
		6							
		7							
		8							
		9							
		10							
21	21 Course Content:								
	Course Content:								
Week	Theoretical		Practice						
1	Definition and properties of differentian equations. Types of first order equations solutions	al ions and							
2	The initial and boundary value proble existence and uniqueness theorem for differential equations	ems, or							
3	First order differential equations								

4	Sepa	Separable, linear Bernoulli, Riccati equations						5									
5	May b variab applic	May become homogeneous equations, the variable substitution method and its applications															
6	Nonlii	Ionlineer differential equations															
7	applic equat	applications of nonlineer differential equations															
8	n th o variat and s	th order differential equations. Fixed or variable-coefficienthomogeneous equations and solution methods.															
9	Non-h metho	Non-homogeneous solution of the equation. method of undetermined coefficiens.															
10	applic differe	applications of higher order , 1 st order differential equations															
11	Variat differe	Variation of parameters and the Cauchy-Euler						ər									
12	Syste soluti	System of differential equations and their solutions															
13	Lapla soluti	Laplace transform and the Laplace transform solution of differential equations.						۱									
14	Physi differe	Physics and engineering applications of differential equations															
22	Texth	ook	s. Re	ferenc	es an	d/or Ot	ther		Ac	li Difer	ensivel	Denkle	emler				
	Materials:						Me	Mehmet Çağlıyan Nisa Çelik									
Activites							Number			Dura	Duration (hour)			Total Work Load (hour)			
TERML	EARN	ING	ACTI	VITIES				UMBE	- IW	ŢIGHT			2.00			42.00	
							14			2.00 22.0			42.00				
Practicals/Labs												20.00					
Qelizstudy and preperation 0							0.0	0.00			0.00						
Homeworks								6			0.00	0.00			0.00		
Fň雄矩象am 1							60	60,00			0.00	0.00			0.00		
		net		(		· · · · · ·										10.00	
Othors	৫৩mm/bbuttom/ofPlerm (Year) Learning Activities to							40	40:00			0.00	0.00			0.00	
Emptrition	Cinders						6	60100			20.00	20.00			20.00		
Total Work Load												180.00					
Total w		ad/	30-br-	l t	. <b>T</b>			al i.a. 41a					-			6.00	
ECTS Credit of the Course						one mid exam, one Finaliay exam											
24	ECT	S/	WO	RK L	OAD	TAB	LE										
25				CON	TRIB			E LE	ARN	IING	ουτα		S TO F		RAM	ME	
	QUALIFICATIONS																
	Р	Q1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16
ÖK1	2		0	3	0	0	0	0	0	0	0	0	0	0	0	3	4
ÖK2	0		5	0	0	0	3	0	0	4	0	0	3	0	0	0	0
ÖK3	0		0	0	4	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

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