	CELL	CYCLI	E REGULATION						
1	Course Title:	CELL C	CLE REGULATION						
2	Course Code:	MBG543	3						
3	Type of Course:	Optional							
4	Level of Course:	Second	Cycle						
5	Year of Study:	1							
6	Semester:	1							
7	ECTS Credits Allocated:	6.00							
8	Theoretical (hour/week):	3.00							
9	Practice (hour/week):	0.00							
10	Laboratory (hour/week):	0							
11	Prerequisites:								
12	Language:	Turkish							
13	Mode of Delivery:	Face to f	ace						
14	Course Coordinator:	Doç. Dr.	BURCU ERBAYKENT						
15	Course Lecturers:								
16	Contact information of the Course Coordinator:	Doç. Dr. Burcu ERBAYKENT TEPEDELEN e-posta: berbaykent@uludag.edu.tr 0 224 29 42847 Fen-Edebiyat Fakültesi, Moleküler Biyoloji ve Genetik Bölümü, Görükle Kampüsü, 16059 Bursa							
17	Website:								
18	Objective of the Course:	Comprehending the basic features of the cell cycle, cell cycle control system, basic control elements, G1-S phase transition, G2-M phase transition, DNA damage control points, check points in mitosis, cell cycle and cancer, techniques used in cell cycle analysis							
19	Contribution of the Course to Professional Development:	To have knowledge about the subject, to be able to use the methods and techniques learned in postgraduate education or in business life							
20	Learning Outcomes:								
		1	Learn the life cycle of a normal cell						
		2	Learn the life cycle of a cancer cell						
		3	Learn cell cycle checkpoints and transition from these points						
		4	Learn the stages of mitosis and meiosis						
		5	Learn cell cycle arrest and apoptosis						
		6	Learn molecular biological methods related to cell cycle analysis.						
		7							
		8							
		9							
		10							
21	Course Content:								
		Co	urse Content:						
Week	Theoretical		Practice						
1	Eukaryotic cell cycle								
2	Mitosis stages								

3	Meio	osis a	and fe	rtilizat	ion															
4	Cell cycle checkpoints																			
5	Cell cycle arrest																			
6	Regulation of cell cycle																			
7	Cell signaling molecules and receptors																			
8	G0-S phase checkpoint																			
9	G2 c	heck	cpoint																	
10	M ch	eckp	point																	
11	Cell	cycle	e and	cance	r															
12	Cell	cycle	e and	apopt	osis															
13	Mole cycle	cula ana	r biolo alysis	ogical	metho	ods use	ed in o	cell												
14	Molecular biological methods used in cell cycle analysis																			
22	Textbooks, References and/or Other Materials:									<ol> <li>Tim Humphrey, Gavin Brooks; Cell cycle control mechanisms and protocols, Humana Press</li> <li>Gary S.Stein, Arthur B.Pardee; Cell cycle and Growth control: Biomolecular regulation and cancer; Wiley-Liss</li> </ol>										
23	Asse	esme	ent						_											
TERM L	EARN	NING	ACTI	VITIES	;		N F	NUMBE R	W	EIGHT										
Midtern	n Exa	m					1	1	40	0.00										
Activit	ctivites									Numb	er		Dura	ition (	hour)	Total Work Load (hour)				
									14			3.00 42.00								
Practic	Practicals/Labs									0			0.00	0.00 0.00						
Safees	Self & your of rear (rear) Learning / termines to								<b></b> ,	14				4.00			56.00			
Homew	omeworks									2			20.00			40.00				
Project	s									100.00				0.00			0.00			
Field S	ld Studies									0			0.00			0.00				
Middlere	istrement and Evaluation rechniques Osed in the													15.00			15.00			
Others	ers									0			0.00			0.00				
Final E	l Exams									1					1	20.00				
Total W	otal Work Load														188.00					
Total w	Fotal work load/ 30 hr									5.7						5.77				
ECTS (	ECTS Credit of the Course															6.00				
25	5 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																			
	F	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16			
ÖK1	5	5	5	0	3	3	2	2	3	3	3	0	0	0	0	0	0			
ÖK2	5	5	5	0	3	3	2	2	3	3	3	0	0	0	0	0	0			
ÖK3	5	5	5	0	3	3	2	2	3	3	3	0	0	0	0	0	0			

ÖK5	5	5	0	3	3	2	2	3	3	3	0	0	0	0	0	0
ÖK6	5	5	0	3	3	2	2	3	3	3	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				