	ONCOGENE	ES AN	D CARCINOGENESIS								
1	Course Title:	ONCOG	ENES AND CARCINOGENESIS								
2	Course Code:	BIO5209	9								
3	Type of Course:	Optiona	nal								
4	Level of Course:	Second	nd Cycle								
5	Year of Study:	1									
6	Semester:	1	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:	none									
12	Language:	Turkish									
13	Mode of Delivery:	Face to	face								
14	Course Coordinator:	Prof. Dr.	NİLÜFER ÇİNKILIÇ								
15	Course Lecturers:										
16	Contact information of the Course Coordinator:	aydemirn@uludag.edu.tr 0.224.2941797 Fen-Edebiyat Fakültesi, Biyoloji Bölümü, Görükle Kampüsü, 16059 Bursa									
17	Website:										
18	Objective of the Course:	To teach cancer genes and their effects on human beings. To learn carcinogenesis process.									
19	Contribution of the Course to Professional Development:	Knowing cancer-causing genes and cancer formation is very important for a graduate student working in the field of genetics.									
20	Learning Outcomes:										
		1	To learn structural, molecular characteristics of living things								
		2	To be qualified for obtaining, interpreting and publishing of the scientific data and considering ethical and scientific values in all participated activities.								
		3	Having the ability to communicate and discuss ideas in verbal and written forms systematically with colleagues in national and international platforms.								
		4	To offer a readily understandable exploration of the basic chemistry and biochemistry of chemical carcinogenesis								
		5	Detecting the problems related with biology, constructing hypothesis to solve these problems and developing the hypothesis by using various observational and experimental methods								
		6	Improving the current and advanced knowledge from the biology field by implementing the qualities gained from Master's education								
		7	To specialize in certain areas of biology and to be able to plan, produce and evaluate the results of a thesis								
		8									
		9									
		10									
21	Course Content:										

								C	ours	se Co	ntent:	! !						
Week	Theo	retica	al						Pr	actice								
1	Onco	genes	s, de	termir	nation	and cl	lassific	cation										
2	Onco	genes	s and	d their	effec	ts on c	ell cy	cle										
3	Onco	genes	s and	d carc	inoge	nic effe	ects											
4	Onco	protei	ins a	nd eff	ects													
5	Tumo	r sup	pres	sor ge	enes a	and cla	ssifica	ation										
6	Tumo		ress	or ger	nes ai	nd cand	cer inc	ducing	ĺ									
7	Multis	step s	truct	ure of	carc	inogen	esis											
8	Tumo	r prog	gress	sion														
9	Metas	stasis	and	effec	ts													
10	Tumo	r prog	gress	sion p	atterr	n: colon	canc	er										
11	Envir	onme	ntal	cause	s of c	ancer												
12	Carci	noger	ns ar	nd hur	nan e	xposur	e											
13		Chemical carcinogenesis and chemoprevention																
14	Mixtu	Mixture complex of chemical carcinogens																
Textbooks, References and/or Other Materials:								Hu Jr.	Molecular Carcinogenesis and the Molecular Biology of Human Cancer, David Warshawsky; Joseph R. Landolph Jr. Taylor and Francis									
Activit	Activites							ľ	Numb	er		Dura	ition (hour)	Total Work Load (hour)			
Mietore	mid ∈ akar	n					0		0.6	14			3.00			42.00		
Practic	als/Lal	bs							()			0.00			0.00		
Hemsu	ykpyrl _{lanin}	uqjeet	berat	tion			1		20	120			3.00			42.00		
Homew	vorks								ŕ	1			25.00			25.00		
₱₱	s						2		102	<u>0.00</u>			25.00			50.00		
Field S	tudies								()			0.00			0.00		
Midterr	n exan	ns)			0.00			0.00		
Others								()			0.00			0.00			
FMal E	Frffal Exams							10	ρ.00			25.00			25.00			
Total Work Load														184.00				
Total work load/ 30 hr 24 ECTS / WORK LOAD TABLE ECTS Credit of the Course							nde	rature	searci	iing and	าเสทรเ	aung		6.13				
ECTS Credit of the Course														6.00				
25			(CON	TRIE	BUTIO	N OI				OUTC	OME:	S TO I	PROC	SRAM	IME		
	P	Q1 P	Q2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1	PQ11	PQ12	PQ1	PQ14	PQ15	PQ16	

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	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	0	0	4	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
LO: Learning Objectives PQ: Program Qualifications																
Contrib 1 very low ution Level:			2 low		3 Medium			4 High			5 Very High					