HEALTH PHYSICS										
1	Course Title:	HEALTH	I PHYSICS							
2	Course Code:	FZK4216	3							
3	Type of Course:	Optional								
4	Level of Course:	First Cyc	le							
5	Year of Study:	4								
6	Semester:	8								
7	ECTS Credits Allocated:	6.00								
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 face								
14	Course Coordinator:	Doç. Dr. GİZEM AKKAYA								
15	Course Lecturers:	Prof.Dr.C	Drhan Gürler							
16	Contact information of the Course Coordinator:	ogurler@uludag.edu.tr, 0 224 29 41 701, UÜ Fen Edebiyat Fakültesi, Fizik Bölümü 16059 Görükle Kampüsü Bursa								
17	Website:									
18	Objective of the Course:	To inform students about the fundamentals of medical physics, which is the application field of radiation.								
19	Contribution of the Course to Professional Development:	To inform students about the fundamentals of medical physics, which is the application field of radiation.								
20	Learning Outcomes:									
		1	Radioactive decay, interaction of nuclear radiation with matter, cross section, linear attenuation coefficients, mass attenuation coefficients are learned.							
		2	Differential and total scattering cross section, energy transfer of nuclear radiation to a medium are learned,							
		3	Radioisotope applications in medicine are learned.							
		4	Calculation of the radiation dose is learned.							
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21	Course Content:									
Mack	Theoretical	Co								
vveek 1	Types of radiation, nuclear radiation									
	characteristics									
2	Interaction of charged particles with	matter								

3	The definition of concepts such as free the path length, range, stopping power	ee path, er									
4	The range distribution of charged par	ticles									
5	Distributions of energy loss of charge particles	ed									
6	Determination of the average energy average range of charged particles	loss and									
7	Radioactivity, radioactive decay and schemes	decay									
8	Interaction with matter of gamma ray	S									
9	Absorption and mass attenuation coe of gamma rays										
10	Scattering of gamma rays										
Activites				Number	Duration (hour)	Total Work Load (hour)					
Th te 2pre	Madterm exam and Guided Problem	Solving		14	2.00	28.00					
Practic	als/Labs			14	2.00	28.00					
Self stu	dy and preperation Absorption dose	,		14	6.00	84.00					
Homew	vorks			10	2.00	20.00					
Project	Badiotherany Applications Coneral F	Roviow		2	20.00						
Field S	tudies		_	0	0.00						
Midtern	n exams			1	2.00	2.00					
Others	Tauthaala Dafamaaaa aral/ar Othan			0 It are Ormerthy Deduce	0.00	0.00					
Fin4a4 E	Materials			inan Ozmuliu, Radyas		21.00					
Total W			a	oveiciete 2009		184.00					
Total w	prk load/ 30 hr		Ľ	193101313,2003.		6.13					
ECISO			BIOLOGY, 4TH EDITION, RUSSEL K. HOBBIE, BRADLEY J. ROTH, SPRINGER,2007.								
23	Assesment										
TERM LEARNING ACTIVITIES NUMBE				/EIGHT							
Midterm Exam 1				40.00							
Quiz 0				0.00							
Home work-project 0				0.00							
Final Exam 1				60.00							
Total		2	100.00								
Contribution of Term (Year) Learning Activities to Success Grade				40.00							
Contrib	ution of Final Exam to Success Grade	9	60.00								

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Total							100	100.00									
Measurement and Evaluation Techniques Used in the Course							ie The app	The aim of the course is to inform about areas of application of the neutron physics									
24 ECTS / WORK LOAD TABLE																	
25	25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																
	PO	21	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16
ÖK1	4		4	3	0	0	2	0	0	3	0	0	0	0	0	0	0
ÖK2	4		3	2	0	0	3	0	0	4	0	0	0	0	0	0	0
ÖK3	3		4	2	0	0	2	0	0	3	0	0	0	0	0	0	0
ÖK4	3		4	2	0	0	3	0	0	2	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																	
Contrib 1 very low ution Level:				2 Iow		3	3 Medium			4 High			5 Very High				