PHYSICS II

1	Course Title:	PHYSICS II	
2	Course Code:	FZK1072	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	1	
6	Semester:	2	
7	ECTS Credits Allocated:	4.00	
8	Theoretical (hour/week):	3.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	2	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Doç.Dr. NİL KÜÇÜK	
15	Course Lecturers:	Prof. Dr. İlker KÜÇÜK Doç. Dr. Nil KÜÇÜK	
16	Contact information of the Course Coordinator:	e-mail: nilkoc@uludag.edu.tr Tel: 0 224 29 41 705 U.Ü., Fen Edebiyat Fakültesi, Fizik Bölümü 16059 Görükle Kampüsü/Bursa	
17	Website:		
18	Objective of the Course:	Teaching the fundamentals of Physics-II.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	The fundamental knowledge of Physics is obtained.
		2	Many potential solutions can be produced for a given problem.
		3	Problems can be analysed by different point of view.
		4	The mutual relationship between problems and subjects are able to be recognised.
		5	The independent ability of learning is developed.
		6	The subjects and relations between them are understood.
		7	The variables in the process can be interpreted.
		8	The datum can be analysed and explained.
		9	
		10	
21	Course Content:		

Course Content:

Week	Theoretical	Practice
1	Electric Charge	Lecture and solving problem
2	Electric Field	Lecture and solving problem
3	Gauss' Law	Lecture and solving problem
4	Electric Potential	Lecture and solving problem

5	Capacitors and Dielectrics	Lecture and solving problem
6	Currents in Materials	Lecture and solving problem
7	Midterm Exam Repetition of lecture	Lecture and solving problem
8	Direct-Current Circuits	Lecture and solving problem
9	The Effects of Magnetic Fields	Lecture and solving problem
10	The Production and Properties of Magnetic Fields	Lecture and solving problem
11	Faraday's Law, Magnetism and Matter	Lecture and solving problem
12	Inductance and Circuit Oscillations	Lecture and solving problem
13	Alternating Currents	Lecture and solving problem
14	Maxwell's Equations and Electromagnetic Fields	Lecture and solving problem

22	Textbooks, References and/or Other Materials:	1. “Physics for Scientists and Engineers”, Raymond A. Serway, John W., (1995) Palme. 2. “University Physics”, Hugh D. Young, Roger A. Freedman, (2007) Pearson Education. 3. “Fundamentals of Physics”, David Halliday, Robert Resnick, (2008), Wiley.
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBE**	**WEIGHT**
Theoretical	0	0.00
Practicals/Labs	2	100.00
Homeworks		
Projects		
Field Studies		
Midterm exams		
Others		
Final Exams		
Total		100.00
Success Grade		

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Home work-project	0	0.00	0.00
Practicals/Labs	14	2.00	28.00
Self study and preperation	14	3.00	42.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	2.00	2.00
Others	3	2.00	6.00
Final Exams	1	2.00	2.00
Total Work Load			122.00
Total work load/ 30 hr			4.07
ECTS Credit of the Course			4.00

25	**CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS**															
	PQ1	**PQ2**	**PQ3**	**PQ4**	**PQ5**	**PQ6**	**PQ7**	**PQ8**	**PQ9**	**PQ10**	**PQ11**	**PQ12**	**PQ13**	**PQ14**	**PQ15**	**PQ16**
ÖK1	4	2	2	0	2	4	4	0	4	3	0	3	0	0	0	0
ÖK2	4	2	2	0	2	4	4	0	4	3	0	3	0	0	0	0
ÖK3	4	3	3	0	2	4	4	0	4	3	0	3	0	0	0	0
ÖK4	4	3	3	0	2	4	4	0	4	3	0	3	0	0	0	0

ÖK5	4	3	3	0	2	4	4	0	4	3	0	3	0	0	0	0
ÖK6	4	3	3	0	2	4	4	0	4	3	0	3	0	0	0	0
ÖK7	4	3	3	0	2	4	4	0	4	3	0	3	0	0	0	0
ÖK8	4	3	3	0	2	4	4	0	4	3	0	3	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**