	ADVANCE	D PHY	SICAL CHEMISTRY						
1	Course Title:	ADVANC	ED PHYSICAL CHEMISTRY						
2	Course Code:	KIM5049							
3	Type of Course:	Optional							
4	Level of Course:	Third Cy	cle						
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:	Prof. Dr.	ASIM OLGUN						
15	Course Lecturers:								
16	Contact information of the Course Coordinator:	Prof. Dr. asimolgu	Asim OLGUN n@uludag.edu.tr						
17	Website:								
18	Objective of the Course:	To comp the field of	lete and discuss in detail some of the missing information in of physical chemistry.						
19	Contribution of the Course to Professional Development:	To be able to interpret their scientific studies better by understanding the advanced level of physicochemistry related to their field.							
20	Learning Outcomes:								
		1	Understanding of basic Physical Chemistry topics						
		2	Comparing and discussion of using methods						
		3	Acquiring of knowledge about intermolecular forces						
		4	Understanding electrical and magnetic properties of molecules						
		5	Understanding and application of Thermodynamic laws and interpretation of these results						
		6	Discussion of Physical and Chemical kinetics topics						
		7							
		8							
		9							
		10							
21	Course Content:	-							
		Co	urse Content:						
Week	Theoretical		Practice						
1	of molecular forces and electrical p of molecules long-range forces, emp intermolecular potentials, weakly ass molecules	oroperties virical sociated							
2	Distinctive properties in gas, Discuss critical properties	sion of							
3	Thermodynamics, laws, thermodyna functions and discussion	mic							

4	Therm functio	ody ns a	nami and c	ics, lav discus:	ws, th sion	ermody	ynami	С												
5	Therm functio	ody ns a	nami and c	ics, lav discus:	ws, th sion	ermody	ynami	С												
6	Liquids	ar	nd the	eir pro	pertie	S														
7	Liquids	ar	nd the	eir pro	pertie	s														
8	Phase phase	ph rule	nase (e and	diagra discu	m, ph Ission	ase eq	uilibri	um,												
9	Therm	ody	nami	ics an	d elec	troche	mistry													
10	Solutio	ns,	cher	nical p	ootent	ial														
11	Colliga	tive	e prop	perties	5															
12	Chemical kinetics																			
13	Chemi	kinet	ics																	
14	Chemical kinetics																			
22	Textbooks, References and/or Other Materials:									 Atkins, P.W., "Fizikokimya", Çev. Yıldız,S.,Yılmaz,H., Kılıç,E., Bilim, Yayıncılık, Ankara, 2001. Yüksel SARIKAYA, Fizikokimya, Baskı, Ankara, Gazi Kitabevi,2000. Alberty, R.A., Silbey, R.J., Physical Chemistry, Wiley, Massachusetts, 1996. 										
23	Assesr	ner	nt																	
Activit	Activites								1	Numb	er		Dura	ition (hour)	Total Work Load (hour)				
Theore	heoretical									4			3.00	3.00			42.00			
Practica	icticals/Labs)			0.00		0.00					
Self stu	f study and preperation								00,					2.00			28.00			
Homew	łomeworks								1				25.00	25.00			25.00			
Economic Succes	ninpution of Term (Year) Learning Activities to							40	40,00				0.00			0.00				
Field St	d Studies								()			0.00	0.00			0.00			
Midtern	Iterm exams															40.00				
Others	ners)			0.00		0.00					
Einal E	asurement and Evaluation Techniques Used in the									performed for evaluation				oject a	45.00					
Total W	al Work Load														220.00					
Total w	tal work load/ 30 hr													6.00						
ECTS (IS Credit of the Course									6.00										
25	25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																			
	PG	1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16			
ÖK1	4	2	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0			
ÖK2	3	4	4	3	3	0	0	0	0	0	0	0	0	0	0	0	0			
ÖK3	2	;	3	0	3	0	3	0	0	3	0	0	0	0	0	0	0			
ÖK4	2	4	4	5	4	3	4	0	0	0	0	0	0	0	0	0	0			

ÖK5	4	3	0	3	0	2	0	0	0	0	0	0	0	0	0	0
ÖK6	4	0	0	4	0	0	0	0	4	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			