GENERAL CHEMISTRY II

1	Course Title:	GENERAL CHEMISTRY II	
2	Course Code:	KIM1032	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	1	
6	Semester:	2	
7	ECTS Credits Allocated:	5.00	
8	Theoretical (hour/week):	2.00	
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:	Doç. Dr. SUAT AKSOY	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	msaksoy@uludag.edu.tr Tel: 0 (224) 2941740 Uludağ Üniversitesi Fen-Edebiyat Fakültesi Kimya Bölümü, 16059, BURSA	
17	Website:		
18	Objective of the Course:	The purpose of this course is to teach the electronic structure of atoms, some atomic properties, chemical bonding of molecules, molecular geometry, properties of liquids and solids, intermolecular interactions, the physical properties of solutions, chemical equilibrium, and acid-base reactions	
19	Contribution of the Course to Professional Development:	With this course, the student gains some important concepts in the field of chemistry that are necessary for his professional development.	
20	Learning Outcomes:		
		1	Learn the concept of orbital and the electron configuration of the atom.
		2	Learns the concepts of atomic radius, ionization energy and electron affinity.
		3	Learns the concepts of Together with the theory of chemical bonding find Lewis symbol and geometry of molecules, polar and non-polar molecules.
		4	Learns the concepts of liquid properties (surface tension, viscosity, vapor pressure), melting point, boiling point, phase diagrams, intermolecular interactions, hydrogen bonding.
		5	Learns the concepts the type and concentration of the solution, the solubility of gases, vapor pressure and the osmotic pressure of the solution, the solution to the freezing point depression and boiling point elevation.
		6	Learns the concepts equilibrium conditions, the equilibrium constant and equilibrium calculations.
		7	Learns the concepts modern acid-base theories, factors affecting the strength of acids and bases, pH scale.
		8	Learns the concepts ion concentration of weak acids and bases in aqueous solution to be calculated.

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21	Course Content:

Course Content:

Week	Theoretical	Practice
1	Electronic Structure of Atoms	
2	Electronic Structure of Atoms	
3	Periyodik Çizelge ve Bazı Atom özellikleri	
4	Periodic table and some atomic properties	
5	Chemical Bonding I	
6	Chemical Bonding I (cont.)	
7	Liquids, Solids and Intermolecular Forces	
8	Liquids, Solids and Intermolecular Forces	
9	MIDTERM	
10	Solutions and Physical Properties	
11	Solutions and Physical Properties (cont.)	
12	Chemical Equilibrium	
13	Acids and Bases	
14	Acids and Bases (cont.)	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	2.00	28.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	27.00	27.00
Others	0	0.00	0.00
Final Exams	1	40.00	40.00
Total Work Load			150.00
ECTS Credit of the Course			5.00

22	Assesment
	R
	1
	0
	1
	2
	Contribution of Term (Year) Learning Activities to Success Grade
	Total
	Total work load/ 30 hr
	Total
	Measurement and Evaluation Techniques Used in the Course

	40.00
	0.00
	0.00
	60.00
	100.00
	40.00
	5.00
	100.00
	Measurement and evaluation are carried out according to the principles of Bursa Uludağ University Associate and Undergraduate Education Regulation.

24	**ECTS / WORK LOAD TABLE**

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	3	1	3	4	1	3	5	1	3	4	4	5	3	3	4	2
ÖK2	3	1	3	4	1	4	3	1	3	4	3	4	3	3	4	2
ÖK3	5	1	3	5	1	4	4	1	3	4	4	4	3	2	4	3

ÖK4	3	1	3	4	1	5	5	1	3	4	4	4	3	2	3	3
ÖK5	4	1	3	5	1	5	5	1	3	4	4	4	2	2	3	4
ÖK6	4	3	3	5	1	4	4	1	3	4	5	5	3	3	2	3
ÖK7	4	2	3	5	1	3	5	1	3	4	5	5	4	4	3	3
ÖK8	3	1	3	4	1	3	4	1	3	4	4	5	2	3	3	4

LO: Learning Objectives PQ: Program Qualifications

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