GENERAL CHEMISTRY I

1	Course Title:	GENERAL CHEMISTRY I
2	Course Code:	KIM1031
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	1
6	Semester:	1
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:	Prof. Dr. RAHMIYE AYDIN
15	Course Lecturers:	Yok
16	Contact information of the Course Coordinator:	rahmiye@uludag.edu.tr Tel: 0 (224) 2941729 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 structure and properties of matter, atom which the smallest building blocks of matter, the names of the formulas of compounds, chemical reactions and equations, properties and types of reaction occurring in aqueous solution, the properties of gases and gas laws.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	Learn the most basic terms of chemistry, the methods applied while doing chemical measurement and speaking of their results and can apply laboratories studies.
	2	Describe theories of the fundamental laws of chemistry and atomic structure.
	3	Learn to identify the characteristics and behavior of states of matter and the structure, names and formulas of compounds
	4	Learn the properties and the stoichiometry of chemical reactions.
	5	Chemical processes occurring in biological environments, learn to interpret by the basic laws of chemistry.
	6	Investigate the developments in the field of chemistry and transfer in the field of biology.
	7	Apply the knowledge of basic chemistry in the biology and chemistry laboratory.
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21	Course Content:	
	Course Content:	

Week	Theoretical	Practice
1	PROPERTIES AND MEASUREMENT OF MATTER: The purpose of chemistry, scientific method, properties and classification of matter.	
2	PROPERTIES AND MEASUREMENT OF MATTER: Measurement of matter, uncertainty in the scientific method, significant figures.	
3	ATOMS AND ATOMIC THEORY: the first discoveries in chemistry and atomic theory, electrons and other discoveries in atomic physics, atomic nucleus, the chemical elements, atomic masses, periodic table entry.	
4	ATOMS AND ATOMIC THEORY: The mole concept and avogadro number, using the mole concept of calculations.	
5	CHEMICAL COMPOUNDS: Chemical compounds and their formulas, the mole concept and chemical compounds, composition of chemical compounds.	
6	CHEMICAL COMPOUNDS: Oxidation steps, naming chemical compounds, nomenclature and formulas of inorganic and organic compounds.	
7	I. Midterm	
9	CHEMICAL REACTIONS: Chemical reactions in solution, determine the limiting component,	
10	REACTIONS IN AQUEOUS SOLUTIONS: The nature of aqueous solutions, precipitation reduction reactions and equalization.	
11	REACTIONS IN AQUEOUS SOLUTIONS: Oxidation-reduction reactions, and agents, stoichiometry of aqueous solutions: Titration	
13	GASES: Properties of gases: the gas equation and its applications, the gases of chemical reactions, gas mixtures.	
14	GASES: The kinetic and molecular theory of gases and gas properties related to this theory, the real gases.	

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	2	27.00	54.00
Others	0	0.00	0.00
Final Exams	1	40.00	40.00
Total Work Load			150.00
Total work load/ 30 hr			5.00
ECTS Credit of the Course			5.00

22	Textbooks, References and/or Other Materials:	General Chemistry I, Petrucci Harwood Herring. Palme Publishing Lecturer course notes
23	Assesment	

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	2	50.00
Quiz	0	0.00

Home work-project	0	0.00
Final Exam	1	50.00
Total	3	100.00
Contribution of Term (Year) Learning Activities to Success Grade		50.00
Contribution of Final Exam to Success Grade		50.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		

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
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	**1 very low**		**2 low**			**3 Medium**			**4 High**			**5 Very High**				