GENERAL CHEMISTRY I

1	Course Title:	GENERAL CHEMISTRY I
2	Course Code:	FEN1011
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):	4.00
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. SEVGÜL ÇALIŞ
15	Course Lecturers:	
16	Contact information of the Course Coordinator:	scalis@uludag.edu.tr ,224-2942296, Uludag Ün.Eğitim Fak. A blok,İlköğretim Böl.16059 Nilüfer, Bursa
17	Website:	
18	Objective of the Course:	To consolidate, improve, complement shortage and show application of chemistry knowledge which is learned in elementary and secondary schools.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	

	1	Have the basic knowledge on the concepts such as properties and states of matter, structure of atom, chemical bonds and molecular structure
	2	To be able to write the formulas of ionic compound and Lewis formula of compound
	3	To be able to determine molecular geometries by using compound formulas
	4	To be able to make chemical calculations
	5	To be able to balance chemical equations
	6	To be able to solve gas problems
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21	Course Content:

Course Content:

Week	Theoretical	Practice
1	The definition,branches, importance, effect on daily life of the chemistry and looking at the historical development of chemistry Scientific methods, significant numbers,properties of matter	

2	Atom and electronic structures of atoms, nucleus of atom, proton, neutron and electron,atomic theory	
3	Modern atomic Theory	
4	Introduction of periodic table, Types and periodic properties of elements Ionization Energies, electronegativity, atomic radius, electron affinities	
5	Introduction of chemical bonds, Lewis structures of molecules, formal charge	
6	Ionic bond, covalent bond, intermolecular forces of attraction	
7	Molecular geometry,	
8	Hybridization and hybrid orbitals	
9	Dipole moment, Covalent bond Theory, bond distance, multiple bonds	
10	Formulas,types and properties of Chemical compounds	
11	Chemical reactions and equations, types of reaction	
12	Oxidation-reduction reactions and to balance equations, The Mole and chemical calculations	
13	Gases, ideal gases, non-ideal gases	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	4.00	56.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	22	3.00	66.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	10.00	10.00
Others	0	0.00	0.00
Final Exams	1	15.00	15.00
Total Work Load			147.00
ECTS Credit of the Course			5.00

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Quiz	0	0.00
Final Exam	1	60.00
Contribution of Term (Year) Learning Activities to		40.00
Contribution of Final Exam to Success Grade		60.00

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	5	0	0	5	5	0	0	0	5	0	0	0	0	0	0	0
ÖK2	5	0	0	5	5	0	0	0	5	0	0	0	0	0	0	0
ÖK3	5	0	0	5	5	0	0	0	5	0	0	0	0	0	0	0

ÖK4	5	0	0	5	5	0	0	0	5	0	0	0	0	0	0	0
ÖK5	5	0	0	5	5	0	0	0	5	0	0	0	0	0	0	0
ÖK6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

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