

CHEMISTRY

1	Course Title:	CHEMISTRY
2	Course Code:	OTPZ105
3	Type of Course:	Compulsory
4	Level of Course:	Short Cycle
5	Year of Study:	1
6	Semester:	1
7	ECTS Credits Allocated:	4.00
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. ZEYNEP ÖMEROĞULLARI BAŞYİĞİT
15	Course Lecturers:	Meslek Yüksekokulları Yönetim Kurullarının görevlendirdiği öğretim elemanları.
16	Contact information of the Course Coordinator:	Öğr.Gör. Sermet Çelikçapa. sermet@uludag.edu.tr
17	Website:	
18	Objective of the Course:	To develop an ability to solve basic quantitative problems regarding the properties of molecules, chemical equilibria, chemical kinetics, and to develop the ability to appropriately apply this knowledge to general scientific problems in various fields of science and engineering
19	Contribution of the Course to Professional Development:	Chemical reactions understanding in textile sector.
20	Learning Outcomes:	
	1	To learn the structure of matter
	2	To learn the structure and properties of atoms
	3	To learn the chemical bondings
	4	To learn the molecular geometry
	5	To learn the concept of chemical equilibrium
	6	To learn general properties of gases and gas laws
	7	To learn general properties of liquid and liquid laws
	8	To learn general properties of solid and solid laws
	9	To learn general properties of solutions and solutions laws
	10	
21	Course Content:	
	Course Content:	
Week	Theoretical	Practice

1	Course description, explanation of topics, activities, evaluation methods and the functioning			
2	Matter, compounds, and mixtures, physical and chemical properties; SI system, units, measurements, accuracy and precision			
3	Structure of atoms, electron, notron, proton, atomic weight, isotopes, izobars			
4	Periodic table; classification of elements, oxidation states of elements, sizes of atoms and ions, electronegativity			
5	Types of chemical compounds, formulas of chemical compounds			
6	Chemical bonding, classification of bonds, ionic bonding, covalent bonding, writing Lewis Structures, Octet Rule			
7	Formal charge, polarity, dipole moment, coordinative covalent bonding			
8	Repeating courses and midterm exam			
9	Mole concept, chemical reactions, oxidation reactions, redox reactions			
10	Properties of gases and pressure, The Ideal Gas Equation, gas properties relating to the Kinetic-Molecular Theory			
11	Properties of liquids, viscosity, surface tension, vaporization of Liquids, vapor pressure and entropy			
Activites		Number	Duration (hour)	Total Work Load (hour)
12	Theoretical	14	2.00	28.00
Practicals/Labs		0	0.00	0.00
Self study and preparation		14	3.00	42.00
22	Textbooks, References and/or Other	Chang, R. "Chemistry" Mc Graw Hill Inc 2009		
Homeworks		4	5.00	20.00
Projects		Olmsted, J., &Williams, J. M., Chemistry, John Wiley & Sons	0.00	0.00
Field Studies		0	0.00	0.00
23	Midterm Assessment	1	10.00	10.00
Others		0	0.00	0.00
Final Exams		1	20.00	20.00
Midterm Exam		1	40.00	
Total Work Load				120.00
Total work load/ 30 hr				4.00
Home work-project		0	0.00	
ECTS Credit of the Course				4.00
Total		2	100.00	
Contribution of Term (Year) Learning Activities to Success Grade		40.00		
Contribution of Final Exam to Success Grade		60.00		
Total		100.00		
Measurement and Evaluation Techniques Used in the Course		Measurement and evaluation is carried out according to the priciples 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	4	3	4	5	4	4	4	3	4	4	4	4	4	4	4	4
ÖK2	3	0	3	4	4	4	0	0	0	0	0	0	0	0	0	0
ÖK3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK9	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			