

## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title	Introduction to Chemistry I	1					
· ·							
Course Code KMY162 Couse Level Short Cycle (Associa		Associate's I	Degree)				
ECTS Credit 3	Workload 74 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course to develop students' ability to think about, substance properties and measurement, atoms and atomic theory, the atomic electron structure of the periodic table and some atomic properties, compounds, stoichiometry and chemical reactions, gases, provide theoretical knowledge in a systematic and comprehensive information on chemical bonds and the basic concepts of chemistry					nds,		
Course Content  Gases and solids, liquids, solutions and numerical properties of the solution, the solution calculations acids and bases, thermochemistry, chemical kinetics, chemical equilibrium and balance of species, solubility equilibria, acid-base equilibria, buffer solutions, thermochemistry, electrochemistry, organic chemistry, organic compounds, Biochemistry, Carbohydrates, Proteins, Lipids					cies,		
Work Placement	N/A						
Planned Learning Activities and Teaching Methods		Explanation	n (Presenta	tion), Discussi	on, Problem	Solving	
Name of Lecturer(s)							

Assessment Methods and Criteria				
Method	Quantity	Percentage (%)		
Midterm Examination	1	40		
Final Examination	1	70		

## **Recommended or Required Reading**

- 1 Genel Kimya. Sabri Alpaydın Abdullah Şimşek Nobel Yayın Dağıtım, 2009
- 2 Öğretim üyesi ders notları.

Week	<b>Weekly Detailed Co</b>	urse Contents
1	Theoretical	Solids, liquids and gases
2	Theoretical	Solutions and numerical properties of the solution, the solution calculations
3	Theoretical	Acids and bases
4	Theoretical	Thermochemistry
5	Theoretical	chemical kinetics
6	Theoretical	Chemical balance and types
7	Theoretical	Solubility equilibria
8	Theoretical	Acid-base balance
9	Theoretical	Buffer solutions
10	Theoretical	Midterm
11	Theoretical	Electrochemistry, organic chemistry, organic compounds
12	Theoretical	carbohydrates
13	Theoretical	proteins
14	Theoretical	lipids
15	Theoretical	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Midterm Examination	1	22	1	23
Final Examination	1	22	1	23
Total Workload (Hours)				
[Total Workload (Hours) / 25*] = <b>ECTS</b>				
*25 hour workload is accepted as 1 ECTS				



Learning Outcomes					
1	To understand the aim of chemistry, material properties and the classification				
2	To understand the first discoveries in chemistry, atomic theory and the structure of atoms				
3	To understand the periodic table, and the number of moles Avogadro				
4	To distinguish the periodic properties of elements, understand the types of chemical compounds, to make chemical formulas				
5	being able to make stoichiometric calculations using chemical reactions and chemical reactions to distinguish equality				
6	Covalent bonding, molecular geometry and hybridization of atomic orbitals be able to understand				

## **Programme Outcomes** (Laboratory Technology)

 To be able to comprehend social, cultural and social responsibilities, to be able to follow national a contemporary problems and developments	nd internationa	d

- Atatürk is bound to Atatürk nationalism in the direction of principles and reforms; Adopting the national, moral, spiritual and cultural values of the Turkish people, open to universal and contemporary developments, the Turkish language is a rich, rooted and productive language; Have a love of language and a consciousness; To have the ability to use as much of a foreign language as he would need to read, taste and habit and professionally.
- To be able to recognize the basic hardware units and operating systems of a computer, having information about internet usage and preparing documents, spreadsheets and presentations on computer by using office programs.
- 4 Acquires theoretical and practical knowledge at the basic level in mathematics, science and vocational field.
- With the knowledge of laboratory technology in the field, he knows and analyzes problems, brings interpretation of data and suggests solutions.
- 6 In laboratories, according to the prepared business plan and program, necessary work can be done to obtain the desired quality products.
- 7 To have professional and ethical responsibility in business life.
- 8 Development and change are open, follow scientific social and cultural innovations, and develop themselves constantly.

## Contribution of Learning Outcomes to Programme Outcomes 1: Very Low, 2:Low, 3: Medium, 4: High, 5: Very High

	L1	L2	L3	L4	L5	L6
P4	5	5	5	5	5	5
P5	3	3	3	3	3	3
P7	5	5	5	5	5	5
P8	4	4	4	4	4	4

