

AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Basic Organic	Chemistry I							
Course Code		KMY183		Couse Level		First Cycle (Bachelor's Degree)				
ECTS Credit 3		Workload	76 (Hours)	Theory		2	Practice	0	Laboratory	0
Objectives of the Course		to create a scientific basis for understanding the functions of life processes of the basic building block of the carbon compounds of living systems and learning the chemical behavior by examining the this basis the acquisition of functional groups, the methods and reaction mechanisms, to do structural analysis evaluating the spectral data.								
Course Content		IUPAC Nomenclature and functional groups, isomers: classification and nomenclature, acids, bases, electrophiles and nucleophiles, the resonance theory and intermediate particles, alkenes: Radical yerdeğişitir reaction mechanism, alkyl halides: SN1, SN2, E1 and E2 mechanisms, alkenes: participation mechanism and various additions,								
Work Placement		N/A								
Planned Learning Activities		and Teaching	Methods	ds Explanation (Presentation), Discussion, Problem Solving						
Name of Lecturer(s)		Assoc. Prof. Erkan FIRINCI, Assoc. Prof. Fatih EYDURAN								

Assessment Methods and Criteria

Method	Quantity	Percentage (%)	
Midterm Examination	1	28	
Final Examination		1	70
Assignment		14	12

Recommended or Required Reading

- 1 Organik Kimya: Solomon
- 2 Organik Kimya: Fessenden

Week	Weekly Detailed Course Contents						
1	Theoretical	IUPAC Nomenclature: alkenes alkenes, alkynes, alkyl halides, alcohols, ethers					
2	Theoretical	IUPAC Nomenclature: Aromatic compounds, aldehydes and ketones, amines, carboxylic acids and their derivatives					
3	Theoretical	Isomers: classification and nomenclature					
4	Theoretical	Alkanes: Synthesis and reactions include: aliphatic radical substitution reaction mechanism					
5	Theoretical	Spectroscopic methods: NMR, IR spectra					
6	Theoretical	Alkyl halides: alkalinity power, Synthesis E1 and E2 reaction mechanisms, spectroscopic data					
7	Theoretical	Alkyl halides: Core affinity power, reactions, SN1 and SN2 mechanisms, spectroscopic data					
8	Theoretical	Alkanes: Synthesis and Reactions: Catalytic and radical addition reactions, mechanisms, spectroscopic data					
9	Theoretical	Midterm					
10	Theoretical	Alkenes: Reactions ionic addition reactions, mechanisms, spectroscopic data					
11	Theoretical	E1, E2 and SN1, SN2 reactions on the core affinity-base, solvent, concentration, leaving group and structure of effect					
12	Theoretical	Alcohols: Synthesis, SN1 and SN2 reaction mechanisms, spectroscopic data					
13	Theoretical	Alcohols: The reaction of E1, E2, SN1 and SN2 reactions, mechanisms and spectroscopic data					
14	Theoretical	Ethers: Synthesis,					
15	Theoretical	Ethers: reactions, SN1 and SN2 reactions, mechanisms, spectroscopic data					
16	Theoretical	Final exam					

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Midterm Examination	1	22	2	24



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Final Examination	1	22	2	24		
		76				
		[Total Workload (Hours) / 25*] = ECTS	3		
*25 hour workload is accepted as 1 ECTS						

Learn	ing Outcomes					
1	To be able to name the organic compound (accordi	ng to IUI	PAC nomenclatur	e)		
2	to determine the structure of the compound alkalinit which one is dominant.	y, acidity	y,the nucleophilic	and electrophilic	properties and able to decide	
3	To know the basic chemical behavior of functional g	roups.				
4	To take into account the concept of isomerism					
5	To use the spectroscopic data.					
6	To understand the reaction mechanisms					

Programme Outcomes (Agricultural Biotechnology)

1	To be able to develop skills in identifying, modeling and solving problems in agricultural biotechnology
2	To be able to synthesize life and engineering sciences for the effective resource planning of agricultural biotechnology applications
3	To be able to interpret about living organisms structure, metabolic and physiological processes in order to propose biotechnological solutions to the agricultural problems
4	To be able to analyze genomic, metabolomic and proteomic information via bioinformatic tools.
5	To have the ability to analyze collected data and interpret the results.
6	To have the ability of individual working ability and to make independent decisions, to work in inter-disciplinary and interdisciplinary teamwork, to communicate by expressing their ideas orally and in writing, clearly and concisely
7	To have the awareness of professional liabilities and ethics
8	To be able to follow current national and international problems
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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
P1	3	3	3	4	4	4
P2	3	5	4	4	3	3
P3	5	4	3	3	4	4
P4	4	4	4	4	5	3
P5	3	3	3	3	4	3
P6	3	3	4	3	3	4
P7	4	3	4	4	4	3
P8	3	4	3	3	4	4

