



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Basic Organic Chemistry I							
Course Code		KMY183		Couese 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 yerdeğiştir 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				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



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

Learning Outcomes

1	To be able to name the organic compound (according to IUPAC nomenclature)
2	to determine the structure of the compound alkalinity, acidity, the nucleophilic and electrophilic properties and able to decide which one is dominant.
3	To know the basic chemical behavior of functional groups.
4	To take into account the concept of isomerism
5	To use the spectroscopic data.
6	To understand the reaction mechanisms

Programme Outcomes (Dairy Technology)

1	Having sufficient infrastructure in basic sciences and engineering subjects and ability to use the theoretical and applied info instantly in this field.
2	Determining the modern techniques, tools and information technologies required for applications related with his field and ability to use them efficiently
3	Ability for planning, projecting, and designing, following up, analyzing and finding target-driven solutions related with his field
4	Ability to have professional ethic and awareness.
5	Ability to work, decide, express opinions orally and in written individually
6	Ability to participate team studies, taking responsibility, making leadership.
7	Ability to conceive Atatürk's principles and reforms, to communicate in Turkish and foreign language.
8	Ability to comprehend the necessity to learn for a life time, to monitor developments in science and technology and continuously renew himself.
9	Having sufficient level of information about production and quality control of milk and dairy products and also product development, increasing product quality and food security fields.
10	Ability to detect, define, solve problems related with his field and to select and apply suitable methods and modeling techniques for this purpose.
11	To be conscious about workplace applications, worker health, work security and environment subjects, to have knowledge about legal results of the engineering applications related with his subject.

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	4	4	4	4	4	4

