

ORGANIC CHEMISTRY

1	Course Title:	ORGANIC CHEMISTRY	
2	Course Code:	KIM1080	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	1	
6	Semester:	2	
7	ECTS Credits Allocated:	4.00	
8	Theoretical (hour/week):	3.00	
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. NEVİN ARIKAN ÖLMEZ	
15	Course Lecturers:	Prof. Dr. Necdet COŞKUN, Doç. Dr. Nevin ARIKAN ÖLMEZ	
16	Contact information of the Course Coordinator:	mtavasli@uludag.edu.tr +90 224 29 41 731 Uludağ Üniversitesi, Fen-Edebiyat Fakültesi, Kimya Bölümü, 16059 Görükle / BURSA, TÜRKİYE	
17	Website:		
18	Objective of the Course:	The aim of the course is being able to make the classification of organic compounds and know the examples of these classes.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	Learning the basic organic chemistry terms
		2	Realizing the general properties of organic compounds
		3	Learning the risks about organic compounds (personal and environmental) and using the chemicals carefully
		4	Being able to link some organic functional groups with textile
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	

1	Alkanes Molecule Geometry and Bond Angle Dash, Condensed and Bond-Line Formulas Aliphatic Alkanes (Methane, Decane)	
2	Alkyl Groups: General Formula Methyl, ethyl, n-propyl, n-butyl, n-pentyl, n-hexyl,....n-decyl Iso-propyl, sec-butyl, tert-butyl, sec-pentyl, neopentyl	
3	Branched alkanes: Structural isomery Systematical nomenclature	
4	Alcohols and Ethers: Water molecule Molecular Geometry and Bond Angle Alcohols: Dash, Condensed and Bond-Line Formulas Primary, secondary and tertiary alcohols Mono and polyalcohols, Systematical nomenclature Intermolecular Forces (H-Bond) Ethers: Dash, Condensed and Bond-Line Formulas Structural isomery Intermolecular Forces (Dipole-Dipole Interactions)	
5	Amines: Ammonia Molecule Molecular Geometry and Bond Angle Dash, Condensed and Bond-Line Formulas Primary, secondary, tertiary and quaternary amines Structural isomery Mono and polyamines, Systematical nomenclature Intermolecular Forces (H-Bond or Dipole-Dipole Interactions)	
6	Aldehydes and Ketones: Carbonyl Group Molecular Geometry and Bond Angle Aldehyde: Dash, Condensed and Bond-Line Formulas Systematical nomenclature Ketones: Dash, Condensed and Bond-Line Formulas Systematical nomenclature Structural isomery Intermolecular Forces (Dipole-Dipole Interactions) (Aldose and Ketose sugars)	

7	<p>Carboxylic acids and Esters: Carbonyl, Hydroxyl and Alkoxy Groups Molecular Geometry and Bond Angle Carboxylic acids : Dash, Condensed and Bond-Line Formulas Systematical nomenclature Mono and polycarboxylic acids Intermolecular Forces (H-Bond) Esters: Dash, Condensed and Bond-Line Formulas Systematical nomenclature Intermolecular Forces (Dipole-Dipole Interactions) Plantal and animal oils, and vaxes</p>	
8	<p>Amidles: Carbonyl, Hydroxyl and Amide Groups Molecular Geometry and Bond Angle Dash, Condensed and Bond-Line Formulas Systematical nomenclature Intermolecular Forces (H-Bond and Dipole-Dipole Interactions) (Amino Acids, Proteinsr and Peptide Bonds)</p>	
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10	<p>Alkenles: Molecular Geometry and Bond Angle Dash, Condensed and Bond-Line Formulas Systematical nomenclature Geometrical Izomery (Cis-/Trans-Isomery) Intermolecular Forces (Van der Waals Interactions) Plantal Fatty Acids</p>	
11	<p>Aromatic Compounds: Aromaticity Benzenoid Aromatic Compounds Heterocyclic Aromatic Compounds Ortho-/meta-/para-positions</p>	
12	<p>Funtional Group Transformations: Determining the oxidation State Elektronegativity (C, H, O, Cl, Br)</p>	
13	<p>Reduction Reaction: Reductive Reactants Oxidation Reaction: Oxidative Reactants</p>	
14	<p>Acid-Base Reactions: Descriptions of Acid and Base Weak Acids Stronge Acids Buffer solutions</p>	
22	<p>Textbooks, References and/or Other Materials:</p>	<p>G. Solomons ve C. Fryhle (Çev. Ed. G. Okay ve Y. Yıldırım), Organik Kimya, Literatür Yayınları, 2002. J. McMurry, Organic Chemistry, Brooks/Cole Publishing Comp., 1992.</p> <p>P. Y. Bruice, Organic Chemistry, Prentice Hall, 2001. R. J. Fessenden ve J. S. Fessenden (Çev. Ed. T. Uyar), Organik Kimya, Güneş Kitabevi, 1992.</p>
23	Assesment	

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
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		
24	ECTS / WORK LOAD TABLE	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	0.50	7.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	24.00	24.00
Others	0	0.00	0.00
Final Exams	1	34.00	34.00
Total Work Load			93.00
Total work load/ 30 hr			3.10
ECTS Credit of the Course			4.00

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	1	1	1	4	1	2	5	2	4	2	1	2	1	3	5
ÖK2	5	1	1	2	4	1	2	5	2	4	2	1	2	1	3	5
ÖK3	5	3	2	1	3	1	2	4	2	4	2	1	2	3	3	5
ÖK4	4	3	2	1	3	1	2	5	2	4	2	1	2	1	3	5
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low		2 low		3 Medium		4 High		5 Very High							