



NEAR EAST UNIVERSITY
Faculty of Veterinary Medicine Course Teaching Plan

1.	Name of the Course	ORGANIC CHEMISTRY
2.	Course Code	VTE103
3.	Course Type	Obligatory
4.	Course Level	Undergraduate
5.	Year	1
6.	Semester/Term	Fall, 1VET
7.	ECTS credits	2
8.	National Credits	2
9.	Theory (hours/week)	2h/week
10.	Practice (hours/week)	-
11.	Prerequisites	None
12.	Other Recommended Considerations for the Course	None
13.	Course Language	English
14.	Teaching type	Flipped Learning technique, face to face at classroom.
15.	Course Coordinator	Serkan Sayiner, DVM. PhD. Assoc. Prof.
16.	Other Lecturers	-
17.	Coordinator's Contact Information	Near East University, Faculty of Veterinary Medicine, Department of Biochemistry, 99138 Nicosia, TRNC serkan.sayiner@neu.edu.tr

18.	Website of the course	https://flippedlearning.neu.edu.tr/
19.	Objectives of the Course	It is an introductory course to acquire the knowledge and skills necessary to understand the basic organic chemistry principles as well as the structure and properties of carbonaceous materials, which will be the basis for biochemistry and other vocational courses.
20.	Contribution of the Course to Professional Development	

21.	Students' Learning Outcomes	LO1	To understand the related concepts/theories.
		LO2	To be able to discuss and offer suggestions of the relevant concepts / theories in their real life.
		LO3	To be able to apply the relevant concepts / theories to the real life / given cases / cases.
		LO4	To be able to critically analyses real life applications of related concepts / theories.
		LO5	To be able to count and explain related concepts.
		LO6	To improve targeted abilities.

22.	Course Content	WEEK	THEORETICAL COURSE CONTENT	PRACTICE CONTENT
		1.	General Chemistry (Structure of Matter, Electron sheath, The Periodic Table, Chemical Bonds)	-
		2.	Matters and their Features (States of Matter, Pure Substances and Mixtures, Homogenous and Heterogenous Systems, Energy and Phase Changes)	-
		3.	Solutions (Dispersion, Hydration, Type of Solutions)	-
		4.	Acids and Bases (Properties, Reactions, pH, Indicators, Biological Buffers)	-
		5.	Redox Reaction (Oxidation and Reduction); Equilibrium in Multiphase Systems (Diffusion, Osmotic Pressure, Dialysis, Surface Tension, Adsorption); Thermodynamics (Energy Forms, Enthalpy, Entropy); Kinetics of Chemical Reactions (Energy of Activation, Catalysts, Factors affecting Reaction Rates)	-
		6.	Carbon (C) Atom (Hybridization, Conjugated Double Bonds, Aromatic Compounds, Carbonyl Group)	-
		7.	Isomerism in Organic Compounds and Stereochemistry (Constitutional Isomerism, Stereoisomerism)	-

		8.	Introduction to Organic Molecules (Characteristic Features of Organic Molecules, Drawing Organic Molecules, IUPAC Multipliers, Naming, Functional Groups)	-
		9.	Hydrocarbons-I (Alkanes)	-
		10.	Hydrocarbons-I (Alkenes, Alkynes, Aromatic Hydrocarbons)	-
		11.	Compounds Containing A Single Bond to A Heteroatom-I (Alkyl Halides, Alcohols, Ethers, Phenols)	-
		12.	Compounds Containing A Single Bond to A Heteroatom-II (Ethers, Amines, Thiols, Sulfides)	-
		13.	Compounds Containing a Carbonyl Group (C=O) (Aldehydes, Ketones)	-
		14.	Compounds Containing a Carbonyl Group (C=O) (Carboxylic Acids, Esters, Amides)	-
23.	Textbooks, References and/or Other Sources	1. https://biyokimya.vet 2. Serpek B (2015). Organik Kimya. 2. baskı. Nobel Akademik Yayıncılık 3. Solomons G, Fryhle C, Snyder S (2016). Organik Kimya. 11th ed. Wiley. 4. Smith JG (2010). Organic Chemistry, 3rd Edition, McGraw-Hill. 5. Smith JG (2012). General, Organic, & Biological Chemistry 2nd Edition, McGraw-Hill. 6. Flipped Learning NEU Lectures' Documents and Videos		

24.	Evaluation	SEMESTER STUDIES	NUMBER	PERCENTAGE OF CONTRIBUTION
		Midterm exam	1	40
		Final exam	1	60
		Total	2	100
		Evaluation Approaches	Exams consist of multiple-choice test /essay/mixed questions.	

25.	ECTS / Student's workload	Activity	NUMBER	Time [hours]	Total workload [hours]
		Class hours (theoretical)	14	2	28
		Practical hours			
		Out of Class Study Time (Pre-study, reinforcement)	14	1	14
		Assignments, Performances			
		Projects			
		Field studies			
		Midterm exams (Exams' preparation)	1	1	1
		Other	2	8	16

		Final exams	1	1	1
		Total workload			60
		Total workload / 30 hours			60/30
		ECTS credits of the lecture			2