



AYDIN ADNAN MENDERES UNIVERSITY
FACULTY OF VETERINARY MEDICINE
VETERINARY MEDICINE
COURSE INFORMATION FORM

Course Title		Medical Chemistry							
Course Code		VET105		Couse Level		First Cycle (Bachelor's Degree)			
ECTS Credit	2	Workload	51 (Hours)	Theory	1	Practice	1	Laboratory	0
Objectives of the Course		To give information about organic chemistry providing a basis on biochemistry, calling and structure of organic compound and functional groups and to give basic their chemical reactions with organic compounds							
Course Content		Atoms, molecules, C elements , acid and bases, chemical bonds, hydrocarbons, alkanes, alken, carboxylic acids, lipids.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Discussion					
Name of Lecturer(s)		Assoc. Prof. Serap ÜNÜBOL AYPAP, Prof. Ayşegül BİLDİK, Prof. Funda KIRAL, Prof. Pınar Alkım ULUTAŞ							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	28
Final Examination	1	54
Practice	1	6
Quiz	1	6
Assignment	1	6

Recommended or Required Reading

1	Ün, R. (1990) Organik Kimya, İstanbul Üniversitesi, İstanbul.
2	İbiş, C. (1990) Organik Analiz ve Organik Reaksiyonlar, İstanbul Üniversitesi, İstanbul.
3	. Zor, D.L. (1988) Temel Organik Kimya, Anadolu Üniversitesi, Eskişehir

Week	Weekly Detailed Course Contents	
1	Theoretical	Atoms and molecules
	Practice	Demonstration of laboratory materials
2	Theoretical	HC component, the number of hydrogen organic compounds, inorganic reactions, organic reactions difference
	Practice	Solutions
3	Theoretical	Chemical bonds, the concept of isomerism
	Practice	Calculations of solutions
4	Theoretical	Types of chemical reactions in organic chemistry
	Practice	The introduction of laboratory instruments
5	Theoretical	Acids and bases
	Practice	pH measurement
6	Theoretical	Hydrocarbons and naming
	Practice	Titration
7	Theoretical	Alkane and Alkene
	Practice	Methyl alcohol experiment
8	Theoretical	Alkyl and aromatic compounds
	Practice	Biuret experiment
9	Theoretical	Aldehydes and ketones
	Practice	Akrolein experiment
10	Theoretical	Alcohols
	Practice	Fehling experiment
11	Theoretical	carboxylic acids
	Practice	Oxalic acid test



12	Theoretical	Ethers
	Practice	Esterification of ethyl alcohol tests
13	Theoretical	Esters
	Practice	Saturation of fatty acids by I
14	Theoretical	Lipids
	Practice	Ninhydrin experiment
15	Theoretical	Candles and soaps
	Practice	Saponification experiment

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	15	0	1	15
Assignment	1	1.5	1	2.5
Reading	15	0	1	15
Quiz	2	1	0.5	3
Midterm Examination	1	7	1	8
Final Examination	1	7	1	8
Total Workload (Hours)				51
[Total Workload (Hours) / 25*] = ECTS				2

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To be able to have basic knowledge of organic chemistry
2	To be able to comprehend the structure and nomenclature of organic compounds.
3	To be able to have the functional groups of organic compounds, and the basic knowledge of chemical reactions
4	To be able to recognize glass materials used in the laboratory.
5	To be able to gain the skill of solution preparation.

Programme Outcomes (Veterinary Medicine)

1	The student knows anatomy, structure/function of organs and tissues as well as physiological mechanisms of especially farm animals.
2	The student successfully executes the clinical applications on the basis of theoretical and applied knowledge.
3	The student diagnoses diseases using various examination methods.
4	The student can perform differential diagnosis by evaluating clinical findings in the light of laboratory findings.
5	The student is able to treat microbial, viral, parasitic and metabolic diseases successfully.
6	The student is able to perform basic surgical operations in animals.
7	The student is able to intervene in any type of parturition.
8	The student knows and executes basic principles of artificial insemination.
9	If the need arises, the student is able to perform necropsy and pathological evaluation for the aim of diagnosis and differential diagnosis.
10	The student knows and executes principles of preventive medicine.
11	The student applies needed applications on veterinary public health and food safety issues
12	The student recognizes different races of within a species on the basis of morphology and physiology
13	The student knows management practices concerning farm animals and is capable of managing of a farm
14	The student prepares animal nutrition rations for farm animals.
15	The student organizes feeding and nutrition programs in animal farms.
16	The student knows and executes the code of veterinary practice
17	The student knows and applies current legislative rules on animal welfare/rights
18	The student takes into account all scientific as well as professional ethic rules in executing veterinary practice
19	The student involves in all fields and practices concerning veterinary medicine

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

	L1	L2	L3
P19	5	5	5

