



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Drugs Effecting On the Liquid-Electrolite and Acid-Base Balance							
Course Code		VFT533		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	4	Workload	98 (<i>Hours</i>)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		To teach basic principles in liquid-electrolite and acid-base balance, liquid-electrolite and acid-base balance disorders and agents used as plasma volume							
Course Content		Introduction, the general principles of liquid-electrolyte and acid-base balance and agents used as plasma volume expanders are examined.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study, Individual Study, Problem Solving					
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Veterinary Pharmacology and Therapeutics, 8th Edition, Jim E. Riviere (Editor), Mark G. Papich (Editor), 2009.
2	Modern Pharmacology, 6th Edition, Lippincott Williams and Wilkins, 2004 (Ed. C.R. Craig and R.E. Stitzel)
3	Basic and Clinical Pharmacology, 9th Edition, McGraw-Hill, New York, 2004 (Ed. B. Katzung)
4	Goodman and Gilman's The Pharmacological Basis of Therapeutics 11th Edition, McGraw-Hill, 2006 (Eds. Brunton, Lazo, Parker, Buxton and Blumenthal)
5	Veterinary pharmacolgy and therapeutics edited by H. Richard Adams. Ames, Iwa Iwa State University Press 2001.

Week	Weekly Detailed Course Contents	
1	Theoretical	General principles of liquid-electrolyte and acid-base balance
2	Theoretical	Equivalent, osmosis and osmolarity
3	Theoretical	Physiology of liquid-electrolyte and acid-base balance
4	Theoretical	Pathophysiology of liquid-electrolyte and acid-base balance
5	Theoretical	Methods of treatment in liquid-electrolyte and acid-base balance disorder-I
6	Theoretical	Methods of treatment in liquid-electrolyte and acid-base balance disorder-II
7	Theoretical	Article discussion
8	Intermediate Exam	Midterm exam
9	Theoretical	Sodium and potassium disturbances and their treatment
10	Theoretical	Calcium and magnesium disturbances and their treatment
11	Theoretical	The other ions balance disorders and their treatment
12	Theoretical	Acidosis and its treatment
13	Theoretical	Alkalosis and its treatment
14	Theoretical	Agents used as plasma volume
15	Theoretical	Article discussion
16	Final Exam	Final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Assignment	5	1	1	10
Seminar	2	5	1	12
Midterm Examination	1	6	2	8



Final Examination	1	10	2	12
Total Workload (Hours)				98
[Total Workload (Hours) / 25*] = ECTS				4
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Should obtain information on the general principles of liquid-electrolyte and acid-base balance and properties of ions
2	To learn liquid-electrolyte disorders
3	To learn acid-base balance disorders
4	Should learn agents used as plasma volume
5	To find out and use resources about the profession in the area.

Programme Outcomes (Veterinary Pharmacology and Toxicology Master's Without Thesis)

1	to be able to comprehend expert knowledge on field of pharmacology and toxicology in veterinary medicine
2	to be able to define expert knowledge on interdisciplinary interaction in pharmacology and toxicology
3	to be able to formulate ideas to solve complex problems using theoretical and practical information gained throughout the pharmacology and toxicology education.
4	to be able to integrate and interpret information in the area of pharmacology and toxicology with information in different fields and, if the need arises, provides scientific information and solutions to solve problems.
5	to be able to develop and use strategies in his/her field of expertise in Master's Program of Pharmacology and Toxicology
6	to be able to comprehend methods of obtained and submitted scientific knowledge
7	to be able to analyse current information related to his/her field of expertise (scientific information, procedures etc.) and use them when necessary
8	to be able to apply technological tools in social relationships of vocational and professional environment.
9	to be able to review, evaluate and interpret any data (field observations, available scientific information etc.) towards a specific purpose.
10	to be able to comprehend expert knowledge on the function and basic pharmacological features of pharmacology and sub-branches of science, relationship between the drug and poison, pharmacokinetic, effects of the drugs, the dose-intensity and dose-effect relationship
11	to be able to identify expert knowledge on the function and basic toxicological features of poison, classifications and types of poisoning, toxicokinetic, general principles of treatment of poisoning.
12	to be able to define and use laboratory equipment in a pharmacology and toxicology laboratory.

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

	L1	L2	L3	L4	L5
P1	4	4	4	4	
P3					5
P4	4	4	4	4	4
P5					5
P6					5
P7	4	4	4	4	
P8					4
P9					5
P10	5	5	5	5	

