AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF HEALTH SCIENCES
VETERINARY PHYSIOLOGY
PHYSIOLOGY (VETERINARY)
PHYSIOLOGY (VETERINARY) MASTER
COURSE INFORMATION FORM

Course Title	Body Fluids And Kidneys								
Course Code	VFZ528		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	4	Workload	100 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	Recognizing the importance of homeostasis in the organism, and the distribution of body fluids, and understanding of the principles of exchange with the substance of the kidney function and tissue fluid								
Course Content	Body fluid compartments, edema, renal blood flow, glomerular filtration and reabsorption and secretion in tubules, blood volume control								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study, Problem Solving								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	38
Final Examination	1	60
Quiz	4	1
Term Assignment	1	1

Recommended or Required Reading	
1	Douglas C. Eaton D.C., Pooler J.P. (2009). Vander's Renal Physiology. Seventh Edition
2	Reece W.O. (2008) Dukes Veteriner Fizyoloji Cilt I ve II, Onikinci Baskı (Türkçe Çeviri). Ed: Yıldız S. Medipres, Malatya
3	Guyton AC, Hall JE (2001) Tıbbi Fizyoloji Onuncu baskı (Türkçe Çeviri). Ed: Çavuşoğlu H. Nobel Tıp Kitabevi, İstanbul
4	Noyan A. (2003). Yaşamda ve Hekimlikte Fizyoloji. 13. baskı, Meteksan-Ankara
5	Randall D., Burggren W., French K, Fernald R., (1997). Eckert Animal Physiology. Mechanisms and Adaptations. 4th Ed., New York
6	G.C. Whittow et al. (1998). Sturke's Avian Physiology
7	Willmer P., Stone G., Johnston I. (2005). Environmental Physiology of Animals. 2nd Ed. Blackwell Publishing
8	Despopoulos A., Silbernagl S. (2003). Color Atlas of Physiology 5th Ed. Thieme, Stuttgart New York
9	Vander et al. (2001). Human Physiology: The Mechanism of Body Function, 8th Ed. The McGraw-Hill Companies

Week	**Weekly Detailed Course Contents**	
1	Theoretical	Homeostasis
2	Theoretical	Distribution of the body fluid
3	Theoretical	Nervous and hormonal control of the body fluid
4	Theoretical	The distribution of sodium and potassium in the body
5	Theoretical	The distribution of calcium and phosphorus in the body
6	Theoretical	The distribution of magnesium and chlor in the body
7	Theoretical	The structure and general functions of the kidney
8	Theoretical	Midterm
9	Theoretical	Function of glomerulus
10	Theoretical	Glomerular filtration rate
11	Theoretical	Renin-angiotensin-aldosteron system
12	Theoretical	Structure of nephrone
13	Theoretical	Reabsorbtion in renal tubules
14	Theoretical	Excration in renal tubules
15	Theoretical	Urine formation

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Assignment	2	2	1	6
Term Project	1	17	1	18
Quiz	4	1	1	8
Midterm Examination	1	8	1	9
Final Examination	1	16	1	17
			Total Workload (Hours)	100
			[Total Workload (Hours) / 25*] = **ECTS**	4
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Importance of water for life, understanding the mechanisms about regulating water and water metabolism
2	To learn methods of determining the amount of water intake and water-extration in human and some animals
3	Homeostasis and the examination of the basic functional systems of the homeostatic mechanisms
4	To be learned of anatomy and functions of kidney, glomerular filtration
5	Clirens and learning of renal function tests and their clinical use
6	To learn about micturation and is nervous control

Programme Outcomes *(Physiology (Veterinary) Master)*	
1	Understands and defines the interdisciplinary interaction with the associated fields
2	Uses theoretical and practical information learned in the education
3	Creates solution proposals by using background education
4	Combines and interprets the information from different disciplines, and creates solution proposals and scientific information to contribute the solution process, when needed
5	Involves in professional organizations and institutions related with the educational background
6	Takes responsibility for individual and group work, and do the assignments in line with the skills
7	Communicates with the professionals out of the field when it is necessary, and contributes to the solution as a team member
8	Understands the production and publishing methods of scientific information
9	Determines the source and the type of information that is needed related with the field and chooses the activities that s/he wants to participate, by using his/her critical thinking abilities that is developed in the education
10	Excels technological devices both for professional and social purposes
11	Compiles any kind of data related with the field (field observations, produced scientific information etc.) and analyzes and interprets the results according to the aims of the research
12	Determines the environmental health rules and applies them for prevention
13	Applies the knowledge gained in professional level with the awareness of the needs of the region and the country, and develops a defense capability
14	Conceptualizes the phenomena and the events related with the field, studies scientific methods and techniques, interprets results; analyzes and hypothesizes methods in accordance with the results and designs solution or treatment alternatives addressing the problems
15	Follows up the updates of information in the field by using all kinds of sources (scientific information, legislations etc.), and uses when needed

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	2	2	2	2	2	2
P2	4	4	4	4	4	4
P3	4	4	4	4	4	4
P4	2	2	2	2	2	2
P5	1	1	1	1	1	1
P6	1	1	1	1	1	1
P7	1	1	1	1	1	1
P8	1	1	1	1	1	1
P9	2	2	2	2	2	2
P10	4	4	4	4	4	4
P11	4	4	4	4	4	4

P12	1	1	1	1	1	1
P13	3	3	3	3	3	3
P14	2	2	2	2	2	2
P15	3	3	3	3	3	3