AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Body Fluids and Excretory Physiology								
Course Code	VFZ602		Couse Level		Third Cycle (Doctorate Degree)				
ECTS Credit	6	Workload	150 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	To get information about overall regulation of body fluid volume, the importance of homeostasis, the functions of kidneys and fluid exchange between extracellular and intracellular compartments.								
Course Content	The body fluid compartments, urine formation by the kidneys, glomerular filtration, renal blood flow and their control, tubular processing of the glomerular filtrate, regulation of extracellular fluid osmolarity and sodium concentration, the roles of kidenys on the regulation of acid-base balance, mixtionkidney disease and diuretics.								
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	6	1
Term Assignment	1	1

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

Week	Weekly Detailed Course Contents	
1	Theoretical	The body fluid compartements.
2	Theoretical	The distribution of sodium and potasium in the body.
3	Theoretical	The reduction of body fluids.
4	Theoretical	Water metabolism.
5	Theoretical	Kaybedilen sıvının fizyolojik süreçlerde yerine konulması
6	Theoretical	The structure and general functions of kidneys.
7	Theoretical	Water and salt balance
8	Theoretical	Midterm
10	Theoretical	The sructure of nephrone.
11	Theoretical	The function of glomerulus
12	Theoretical	Glomerular filtration rate
13	Theoretical	Tubular reabsorption
14	Theoretical	Tubular secretion
15	Theoretical	Acidification of urine ve bicarbonate resorption.

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Assignment	4	3	1	16

Term Project	1	30	0	30
Quiz	6	2	1	18
Midterm Examination	1	18	1	19
Final Examination	1	24	1	25
			Total Workload (Hours)	150
			[Total Workload (Hours) / 25*] = **ECTS**	6
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	1. To learn the importance of water for life, the water metabolism and the mechanisms in relation to regulation of water.
2	2. To detect daily intake and output water and to learn its methods in humans and certain animals.
3	To learn homeostasis and the homeostatic mechanisms of main functional systems.
4	4. The anatomy and functions of kidneys, to evaluate clirens and kideny function tests.
5	5. To learn urination and its neurological control
6	6. To learn glomerular filtration.

Programme Outcomes *(Physiology (Veterinary Medicine) Doctorate)*	
1	Has a deep and broad knowledge about the field and the interdisciplinary area related with the field through the achievements gained in undergraduate and professional levels
2	Has the knowledge to create original ideas, analyze them and develop definition/product/diagnosis methods by using the knowledge gained in undergraduate and/or professional experience, when needed
3	Is knowledgeable about theories and practices in methodological and scientific research methods to run an independent research
4	Excels in the laboratory, clinical and similar fields by using the theoretical and practical information gained in former education, and has the ability to create solutions in related fields
5	Designs and develops scientific methodology for the advanced level/newly defined/emerged problems about the field
6	Excels in the known scientific methods in the field for the advanced level/ newly defined/emerged problems
7	Designs unique researches and implements independently
8	Analyzes, synthesizes and evaluates the new ideas in related fields by using critical thinking
9	Plans, creates teams and carries out the interdisciplinary research projects in order to create solutions to the known/newly defined problems
10	Joins to congresses, panels, symposiums, workshops, seminars, article discussions and problem solving sessions in different disciplines, and exchanges information with the other professionals to contribute to the solutions
11	Broadens the borders of scientific information by publishing scientific articles in national and/or international peer-reviewed journals
12	Creates new ideas and methods to contribute to the technological, social and cultural progress, or to help the development of information society by using the theoretical, practical, independent research, abilities responsibly
13	Designs and implements social projects with the awareness of creating an information society
14	Compiles and interprets any type of data (field observation, scientific knowledge etc.) in accordance with the aims
15	Develops and uses strategies about related topics with the field
16	Implements and defends institutional and practical information and abilities in accordance with the needs of the country and the world, and changes when necessary
17	Follows up and uses all the updates about the field (scientific information, legislations etc.), and has the qualification to change them
18	Adopts lifelong learning as a principle and acknowledges that the information gained through research is the most valuable gain

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	2	2	2	2	2	2
P3	1	1	1	1	1	1
P4	3	3	3	3	3	3
P5	2	2	2	2	2	2
P6	2	2	2	2	2	2
P7	1	1	1	1	1	1
P8	3	3	3	3	3	3
P9	1	1	1	1	1	1

P10	3	3	3	3	3	3
P11	4	4	4	4	4	4
P12	2	2	2	2	2	2
P13	1	1	1	1	1	1
P14	4	4	4	4	4	4
P15	4	4	4	4	4	4
P16	4	4	4	4	4	4
P17	4	4	4	4	4	4
P18	4	4	4	4	4	4