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

Course Title	Respiratory Physiology								
Course Code	VFZ505		Couse Level		Second Cycle (Master's Degree)				
ECTS Credit	4	Workload	100 *(Hours)*	Theory	1	Practice	2	Laboratory	0
Objectives of the Course	To comprehend fundementals of the respiratory physiology								
Course Content	Lung ventilation, lung volumes and capacities, pulmonary circulation, oxygen and carbon dioxide transport in blood and body fluids, respiratory regulation								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, Discussion, Case Study, Individual Study, Problem Solving								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	38
Final Examination	1	60
Quiz	2	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	Respiratory organs
	Practice	Printing of normal respiratory movements
2	Theoretical	Mechanisms of the inspiration and the expiration
	Practice	Voluntary apnea and its effects on respiration
3	Theoretical	Type of respiration
	Practice	The effects of exersice on respiratory movements
4	Theoretical	Lung volumes and capacities
	Practice	The effects of experimental respiratory acidosis on respiration
5	Theoretical	Surface tension and surfectan
	Practice	The effects of experimental respiratory alkalosis on respiration
6	Theoretical	Transportation of the oxygen and carbondioxide

6	Practice	Effects of hiccups on respiration
7	Theoretical	Gas Exchange in lung
	Practice	Experimental setup for lung volumes and capacities
8	Theoretical	Midterm
	Practice	Midterm
9	Theoretical	Oxygen dissociation
	Practice	Clinical use of lung volumes and capacities
10	Theoretical	Nervous control of respiration
	Practice	Respiratory volumes: Tidal volume and inspiratory reserve volume
11	Theoretical	Anoxia and cyanosis
	Practice	Respiratory volumes: Expiratory reserve volume and residual volume
12	Theoretical	Respiration in avian species -I
	Practice	Lung capacities-I
13	Theoretical	Respiration in avian species -II
	Practice	Lung capacities -II
14	Theoretical	Other functions of respiratory system
	Practice	The effects of air content on the respiratory volumes
15	Theoretical	Presentations
	Practice	The effects of surfactant on the respiratory volumes

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	1	28
Lecture - Practice	14	0	2	28
Assignment	2	2	1	6
Term Project	1	15	1	16
Quiz	2	1	1	4
Midterm Examination	1	6	1	7
Final Examination	1	10	1	11
			Total Workload (Hours)	100
			[Total Workload (Hours) / 25*] = **ECTS**	4

**25 hour workload is accepted as 1 ECTS*

Learning Outcomes

1	To have knowledge about structures and functions of the respiratory tract in different animal species
2	To have knowledge about structures and functions of the lung
3	To comprehend the mechanisms of the expiration and inspiration
4	To have knowledge about gas transport and acide-base balance
5	To have knowledge about physiopathology of the respiration
6	To gain ability to recording and interpreting of the lung volumes

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	3	3	3	3	3	3
P3	3	3	3	3	3	3
P4	2	2	2	2	2	2
P5	2	2	2	2	2	2
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	2	2	2	2	2	2
P11	4	4	4	4	4	4
P12	1	1	1	1	1	1
P13	2	2	2	2	2	2
P14	2	2	2	2	2	2
P15	3	3	3	3	3	3