



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

Course Title	Veterinary ECG								
Course Code	VFZ521		Course Level		Second Cycle (Master's Degree)				
ECTS Credit	6	Workload	150 (Hours)	Theory	1	Practice	2	Laboratory	0
Objectives of the Course	Using by ECG, the interpretation of the electrical events and physiological and pathophysiological processes in the heart								
Course Content	Normal ECG characteristics, ECG recording methods, vectorial analysis of ECG, cardiac arrhythmias and their interpretation with the ECG								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, Discussion, Individual Study, Problem Solving								
Name of Lecturer(s)	Prof. Hümeysra ÜNSAL								

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	Yılmaz, B. (2000). Fizyoloji. 2. Basım, feryal Matbaacılık, Ankara
2	Martin M. (2007). Small Animal ECG's. An introductory guide. 2nd Ed. Blackwell Publishing Ltd

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition and history of the ECG
	Practice	Some ECG devices and standardization
2	Theoretical	ECG uses in veterinary medicine
	Practice	Electrodes
3	Theoretical	Nomenclature
	Practice	Leads
4	Theoretical	Electrodes and leads
	Practice	Prevention of artifacts in ECG
5	Theoretical	Sections of ECG that normally occurring
	Practice	Merging to animal
6	Theoretical	Artifacts
	Practice	ECG recording
7	Theoretical	Electrical axis of heart
	Practice	ECG and its sections
8	Theoretical	Midterm
	Practice	Midterm



9	Theoretical	The effects of some factors on the ECG
	Practice	Calculation of heart rate using by ECG
10	Theoretical	Arrhythmias and their appearances in ECG
	Practice	Arrhythmias and their appearances in ECG
11	Theoretical	Extrasistol
	Practice	Tachycardia and their appearances in ECG
12	Theoretical	Tachycardia and their appearances in ECG
	Practice	Fibrillation
13	Theoretical	Fibrillation
	Practice	Heart block types and ECG
14	Theoretical	Heart block types and ECG
	Practice	Interpretation of ECG-I
15	Theoretical	Presentations
	Practice	Interpretation of ECG -II

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	1	28
Lecture - Practice	14	1	2	42
Assignment	4	2	1	12
Term Project	1	28	2	30
Quiz	4	2	1	12
Midterm Examination	1	10	1	11
Final Examination	1	14	1	15
Total Workload (Hours)				150
[Total Workload (Hours) / 25*] = ECTS				6

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To learn the working principles of electrocardiography machine
2	To be informed of basic principles of electrocardiography
3	To be informed about ECG stages in different animal species
4	To comprehend characteristics of deflections that occurred in ECG recording paper
5	To be able to identify and interpret the ECG changes which become in heart diseases

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
P1	2	2	2	2	2
P2	4	4	4	4	4
P3	4	4	4	4	4
P4	2	2	2	2	2
P5	3	3	3	3	3
P6	1	1	1	1	1
P7	1	1	1	1	1
P8	3	3	3	3	3
P9	2	2	2	2	2
P10	5	5	5	5	5
P11	5	5	5	5	5
P12	1	1	1	1	1
P13	5	5	5	5	5
P14	4	4	4	4	4
P15	4	4	4	4	4

