



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

Course Title	Electroneuromyography (enmg)								
Course Code	VFZ522		Course Level		Second Cycle (Master's Degree)				
ECTS Credit	6	Workload	150 (Hours)	Theory	1	Practice	2	Laboratory	0
Objectives of the Course	To be able to use electroneuromyography in clinical and researches								
Course Content	Action potential, nerve conduction velocity, compound muscle action potential, motor unit action potential								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, 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	Furr M., Reed S. (2008). Equine Neurology. Blackwell Publishing
2	Purves D. et al. (2004). Neuroscience. Third Ed. Sinauer Associates, Inc. Publishers
3	Lorenz M.D., Kornegay N.J. (2004). Handbook of Veterinary Neurology. Saunders Company

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition and history of EMG
	Practice	General features of the EMG device
2	Theoretical	Overview of research on nerve conduction
	Practice	Stimulating electrodes
3	Theoretical	Nomenclature used in ENMG studies
	Practice	Recording electrodes
4	Theoretical	Deflections of EMG
	Practice	Methods of creating nerve damage
5	Theoretical	Prevention of artifacts
	Practice	Stimulus techniques
6	Theoretical	Stimulus
	Practice	Recording standardization
7	Theoretical	Action potential
	Practice	Stimulus and latency in ENMG
8	Theoretical	Midterm
	Practice	Midterm



9	Theoretical	Latance
	Practice	Sensory and motor conduction velocity
10	Theoretical	Amplitude
	Practice	H reflex
11	Theoretical	Conduction velocity
	Practice	ENMG in small animals-I
12	Theoretical	F deflection ve H reflex
	Practice	ENMG in small animals -II
13	Theoretical	Damaging in peripheral nerves and results of ENMG
	Practice	ENMG in farm animals -I
14	Theoretical	Recovery in nevre and ENMG
	Practice	ENMG in farm animals -II
15	Theoretical	Presentations
	Practice	Data evaluation

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	30	2	32
Quiz	4	1	1	8
Midterm Examination	1	10	1	11
Final Examination	1	16	1	17
Total Workload (Hours)				150
[Total Workload (Hours) / 25*] = ECTS				6

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To know the usage of electroneuromyography
2	To be able to diagnostically use of electroneuromyography or to use it to solve the problem
3	To be able to record muscle potentials using electroneuromyography
4	To be able to mesure nerve conduction velocity using electroneuromyography
5	To be able to considerate results obtained by electroneuromyography

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	3	3	3	3	3
P3	3	3	3	3	3
P4	2	2	2	2	2
P5	2	2	2	2	2
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	3	3	3	3	3
P11	4	4	4	4	4
P12	1	1	1	1	1
P13	5	5	5	5	5
P14	3	3	3	3	3
P15	4	4	4	4	4

