



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Laboratory Practices - II							
Course Code		VFZ634		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	6	Workload	150 (<i>Hours</i>)	Theory	0	Practice	4	Laboratory	0
Objectives of the Course		To make practice for clinical research on issues such as EMG, pulse respiration, digestion, nerve conduction, isolated organ bath, heart movements and rumen fluids							
Course Content		Blood pressure measurement methods, heart sounds, lung volumes and capacities, identification of rumen microflora and fauna, EMG, smooth muscle contraction							
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	4	1
Term Assignment	1	1

Recommended or Required Reading

1	1. Harvey J.W. (2001). Atlas of Veterinary Hematology. W.B. Saunders Company.
2	2. Sterling T. Bennett S.T., Lehman C.M., Rodgers G.M. (2007). Laboratory Hemostasis. A Practical Guide for Pathologists. Springer Science Business Media, LLC.
3	3. Weiss D.J., Wardrop J. (2010). Schalm's Veterinary Hematology. 6th Ed. Blackwell Publishing Ltd.
4	Martin M. (2007). Small Animal ECG's. An introductory guide. 2nd Ed. Blackwell Publishing Ltd.
5	Reece W.O. (2008) Dukes Veteriner Fizyoloji Cilt I ve II, Onikinci Baskı (Türkçe Çeviri). Ed: Yıldız S. Medipres, Malatya.

Week	Weekly Detailed Course Contents	
1	Practice	Respiratory movements
2	Practice	Recording smooth muscle movements using isolated organ bath
3	Practice	Breathing, heart rate and ECG recording simultaneously
4	Practice	Recording of arterial blood pressure
5	Practice	Listening to heart sounds
6	Practice	Capillary blood circulation
7	Practice	Pulse wave recording
8	Practice	Midterm
9	Practice	Rumen movements
10	Practice	Rumen protozoa counting
11	Practice	Rumen bacteria counting
12	Practice	Assembly in vitro rumen
13	Practice	Rumen pH measurement
15	Practice	Direct and indirect measurement of blood pressure

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Practice	14	2	4	84
Assignment	2	2	1	6
Term Project	1	20	1	21
Quiz	4	2	1	12
Midterm Examination	1	10	1	11



Final Examination	1	15	1	16
Total Workload (Hours)				150
[Total Workload (Hours) / 25*] = ECTS				6
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	1. To make EMG recording and its interpretation
2	2. To learn the principles of the isolated organ bath and set to work
3	3. To measure direct and indirect blood pressure
4	4. The recording and interpretation of the heart sounds
5	5. To make microscopic examination of the rumen fluids

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



P16	5	5	5	5	5
P17	5	5	5	5	5
P18	5	5	5	5	5

