AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Physiology Laboratory Practices						
Course Code		VFZ537		Couse Level		Second Cycle (Master's Degree)		
ECTS Credit	6	Workload	150 *(Hours)*	Theory	0	Practice	4	Laboratory	0
Objectives of the Course		To comprehend hematological methods and applications, ECG and EMG in veterinary medicine, measurement of muscle potentials and nerve conduction velocity in practice. To learn practically about mechanisms about bleeding and clotting time						
Course Content		The preparation of solution which are used in the laboratories, blood cell counting, blood smear and its evaluation, ESR, osmotic fragility, bleeding and clotting time						
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	6	1
Term Assignment	1	1

Recommended or Required Reading

1	Harvey J.W. (2001). Atlas of Veterinary Hematology. W.B. Saunders Company
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	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

Week	Weekly Detailed Course Contents	
1	Practice	Blood collection
2	Practice	Machine that are used in hematology
3	Practice	Determination hemoglobin count
4	Practice	Determination hematocrite
5	Practice	ESR
6	Practice	Determination of osmotic fragility
7	Practice	Blood groups
8	Practice	Midterm
9	Practice	Cross-matching technique
10	Practice	Determination of factors about bleeding and clotting
11	Practice	Approach to the patient and preparation of ECG
12	Practice	Leads
13	Practice	EKG recording
14	Practice	Interpretations of ECG
15	Practice	EMG recording and interpretation

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	4	70
Assignment	2	2	1	6
Term Project	1	20	1	21
Quiz	6	4	1	30
Midterm Examination	1	6	1	7

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	To be able to analyze and interpret about erythrocyte
2	To be able to analyze and interpret about leukocyte
3	To be able to record and interpret ECG in different animal species
4	To be able to record and interpret EMG in different animal species
5	To be able to determine coagulation factors

Programme Outcomes *(Physiology (Veterinary Medicine) 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	2	2	2	2	2
P6	1	1	1	1	1
P7	1	1	1	1	1
P8	4	4	4	4	4
P9	2	2	2	2	2
P10	5	5	5	5	5
P11	5	5	5	5	5
P12	4	4	4	4	4
P13	5	5	5	5	5
P14	5	5	5	5	5
P15	5	5	5	5	5