AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Laboratory Practices - I							
Course Code		VFZ633		Couse Level		Third Cycle (Doctorate Degree)			
ECTS Credit	6	Workload	150 *(Hours)*	Theory	0	Practice	4	Laboratory	0
Objectives of the Course		To make using appropriate methods for laboratory research and clinical applications.							
Course Content		Preparation of the solutions used in laboratories, blood cells count, blood smear construction and assessment, sedimentation, erythrocyte osmotic fragility, bleeding and clotting time determination, ECG.							
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)		Prof. Ferda BELGE							

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	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.

Week	Weekly Detailed Course Contents	
1	Practice	Blood withdrawing
2	Practice	Diluting pipettes and solutions used in hematology
3	Practice	The devices used in hematology
4	Practice	Determination of hemoglobin and hematocrit
5	Practice	Sedimentation and osmotic fragility
6	Practice	Red blood cell indexes and anemia
7	Practice	Blood groups
8	Practice	Midterm
9	Practice	Cross-comparison method
10	Practice	Agglutination tests in the diagnosis of neonatal isoerythrolysis
11	Practice	Bleeding and coagulation applications, determination of the clotting factors
12	Practice	Several ECG devices
13	Practice	ECG standardization
14	Practice	ECG recording
15	Practice	Interpretation of ECG

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Practice	14	2	4	84
Assignment	2	2	1	6
Term Project	1	14	1	15
Quiz	6	2	1	18
Midterm Examination	1	12	1	13

Final Examination	1	13	1	14
			Total Workload (Hours)	150
			[Total Workload (Hours) / 25*] = **ECTS**	6
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To learn the general rules of conducting research in the laboratory
2	To make the blood analyses
3	To interpretation of the results of blood analysis
4	Be able to record ECG
5	Be able to interpretation of ECG

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	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	4	5

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