AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Metabolic Control Analysis in Cattle						
Course Code	VİH633		Couse Level	Third Cycle (Doctorate Degree)			
ECTS Credit	6	Workload	149 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	The carbohydrate, fat and protein metabolism disorders, macro and track element deficiencies, alimentary and other reasons related disorders of acid- base balance, liquid-electrolyte balance disorders, vitamin deficiencies, liver functional disorders, selection of animal material for diagnostic of anomies and osteoptahyies, determining the hematologic and biochemical parameters and its combinations, assessing the results by taking the biological sample and processing.						
Course Content	See weekly course topics.						
Work Placement	N/A						
Planned Learning Activities and Teaching Methods			Explanation (Presentation), Discussion				
Name of Lecturer(s)	Lec. Gülten Emek TUNA						

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	25
Final Examination	1	60
Assignment	4	15

Recommended or Required Reading

1	C. M. Kahn, S. Line; The Merck Veterinary Manual, 10th Edition. Merck, 2010
2	Bradford P. Smith; Large Animal Internal Medicine, 4th Edition. Mosby, 2009
3	Radostits, Otto M. [and others], eds. Veterinary Medicine: A Textbook of the Diseases of Cattle, Sheep, Pigs, Goats and Horses. 10th ed. WB Saunders, 2007
4	Blowey, R. W., and Weaver, A. David; Color Atlas of Diseases and Disorders of Cattle, 2nd ed. Mosby, 2003
5	Y. Gul. Geviş Getiren Hayvanların İç Hastalıkları (Sığır Koyun Keçi) (Genişletilmiş 3.Baskı). 2012.
6	McCaughan CJ. Treatment of mineral disorders in cattle. Vet Clin North Am Food Anim Pract. 1992 Mar;8(1):107-45.
7	Oetzel GR. Monitoring and testing dairy herds for metabolic disease. Vet Clin North Am Food Anim Pract. 2004 Nov;20(3):651 -74.

Week	Weekly Detailed Course Contents	
1	Theoretical	The importance of metabolic control
2	Theoretical	Sample select in metabolic diseases
3	Theoretical	Laboratory methods
4	Theoretical	Metabolic control in skeleton system diseases
5	Theoretical	Alimentary disorders of acid base balance
6	Theoretical	Trace element deficiency
7	Theoretical	Vitamin deficiency
8	Intermediate Exam	Midterm
9	Theoretical	Energy metabolism disorders
10	Theoretical	Liver function disorders
11	Theoretical	Anemia profile
12	Theoretical	Ruminal acidosis and alkalosis
13	Theoretical	Hypocalsemic Parturient Paresis and Tetany
14	Theoretical	Referance range and Interpretation to results
15	Theoretical	Discussion
16	Final Exam	Final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28

Assignment	4	0	20	80
Reading	14	0	1	14
Midterm Examination	1	0	11	11
Final Examination	1	0	16	16
			Total Workload (Hours)	149
			[Total Workload (Hours) / 25*] = **ECTS**	6

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Considers the metabolic panel of the cattle's
2	Sent to analysis by taking appropriate samples
3	Defines the problem by interpreting the analysis results
4	Interpret metabolic panel tests.
5	Makes necessary prophylactic measures in the light of metabolic controls.

Programme Outcomes *(Internal Diseases (Veterinary Medicine) Doctorate)*

1	Based on acquirements relevant to undergraduate and/or graduate levels, usage of associated information deeply, development of knowledge by several methods along with reaching peculior results.
2	Detecting relevant problems, establishing hypothesis against solution, acquirement of solving hypothesis within computational and experimental methods.
3	A systematic approach of evaluating and using new knowledge on related field.
4	Usage of previously known scientific methods related to field for advanced/newly known/occuring problems.
5	For Large and Small Animal Internal Medicine, taking into account the systemic clinical examination, realizing the true diagnosis for interpreting the clinical and laboratory findings, and the need to implement effective and rational treatment for taking prophylactic measures.
6	Detecting the problems related to Turkish animal husbandry related to herd health and prophylactic veterinary surgeon.
7	Reviewing and usage of all related data (field observations, scientific knowledge) for requirements.
8	Innovation in the field of science, the scientific method for a new area of development and application of a method known to have one of a new plan that for.
9	Following, evaluating, presenting and discussing the international literature in the field of Veterinary Internal Medicine.
10	Offering all kinds of development and innovation in the field of appropriate methods, the economic and social advancement of the society for contribution.

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3
P1	4	4	4
P2	4	3	5
P3	4	4	4
P4	4	4	4
P5	5	5	5
P6	5	5	5
P7	4	4	4
P8	4	3	5
P9	4	3	4
P10	5	3	5