AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Metabolic Diseases and Biochemical Tests								
Course Code	VBY531		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	4	Workload	102 *(Hours)*	Theory	1	Practice	2	Laboratory	0
Objectives of the Course	Describe the major metabolic diseases of domestic animals and make a determination of biochemical parameters in these diseases								
Course Content	Obesity, starvation, inherited metabolic diseases, metabolic diseases due to malnutrition and related biochemical parameters analysis.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, Individual Study								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Quiz	2	10
Assignment	2	10

Recommended or Required Reading	
1	1-Temel Klinik Biyokimya(Prof. Dr. Bahattin ADAM, Dr. Zeynep GÖKER, Dr. Yasemin ARDIÇOĞLU),
2	Lippincott Biyokimya 3. Baskı(Doç. Dr. Engin ULUKAYA),
3	The biochemistry of cell signalling (Helmreich, E. J. M.),
4	Subcelllular biochemistry (Ed.: Harris, J. Robin)

Week	Weekly Detailed Course Contents	
1	Theoretical	Overview of metabolic diseases
	Practice	Video presentation about the metabolism and metabolic diseases
2	Theoretical	Obesite
	Practice	Brainstorm: How to struggles of Obesity?
3	Practice	Determination of serum glucose concentration
4	Theoretical	Diabetes mellitus and Diabetes insipidus
	Practice	Determination of ADH
5	Theoretical	Ketosis
	Practice	Searching for ketones in the urine
6	Theoretical	Hypoparathyroidism ve hyperparathyroidism
	Practice	Determination of serum calcium
7	Theoretical	Hipoadrenokortisim ve hiperadrenokartisizm
	Practice	Determination of ACTH
8	Theoretical	Rachitis and osteomalacia
	Practice	Determination of Vİt D
9	Practice	Evaluation of Midterm exam
	Intermediate Exam	Midterm exam
10	Theoretical	Milk fever ve grass tetany
	Practice	Determination of Magnesium
11	Theoretical	Copper deficiency
	Practice	Determination of Copper
12	Theoretical	Hepatic lipidosis
	Practice	Determination of trigliseride
13	Theoretical	Puerperal hemoglobinüri
	Practice	Searching for hemoglobine in urine

14	Theoretical	Glycogen storage diseases ve galactosemia
	Practice	Determination of lactate
15	Theoretical	Fenilcetonuria and cystic fibrosis
	Practice	General evaluation
16	Practice	Evaluation of final exam
	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Lecture - Practice	14	0	2	28
Assignment	2	5	2	14
Quiz	2	5	2	14
Midterm Examination	1	10	1	11
Final Examination	1	20	1	21
			Total Workload (Hours)	102
			[Total Workload (Hours) / 25*] = **ECTS**	4

**25 hour workload is accepted as 1 ECTS*

Learning Outcomes

1	To be able to recognize the metabolik disseases in pets.
2	To be able to examine the causes of this metabolic diseases
3	To be able to identify the increasing and decreasing biochemical parameters of the diseases.
4	To have knowledge about current approaches used in the treatment of these metabolic diseases
5	To be able to analyze some of the parameters.

Programme Outcomes *(Biochemistry (Veterinary Medicine) Master)*

1	To be able to tell and describe the interdisciplinary interaction with the associated fields.
2	To be able to express original ideas useing his/her higher education knowledge theoretically and practically information and to be able to creat original defination,products,methods improving and questioning these ideas.
3	To be able to manage a free research according to scientifical and metodological methods and be able to hypothetically and practically about his/her own field.
4	To be able to compose and interpret the information from different disciplines, and create solution suggestions and scientific information which can contribute to the solution process.
5	To be able to involves in professional organizations and institutions related with the educational background.
6	To be able to take responsibility for individual and group work, and do the assignments in line with the skills.
7	To be able to communicate with the professionals out of the field when it is necessary, and contribute to the solution as a team member.
8	To be able to tell about the production and publishing methods of scientific information.
9	To be able to design 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	To be able to use technological devices both for professional and social purposes.
11	To be able to compose and interpret 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	To be able to define the environmental health rules and apply them for prevention.
13	To be able to apply the knowledge gained in professional level with the awareness of the needs of the region and the country, and develop a defense capability.
14	To be able to conceptualize the phenomena and the events related with the field; study scientific methods and techniques, interpret results; analyze and hypothesize methods in accordance with the results and design solution or treatment alternatives addressing the problems.
15	To be able to interpret the updates of information in the field by using all kinds of sources (scientific information, legislations etc.), and use 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
P2	5	5	5		5
P3			5		

P4		4	4		4
P9		5	5		
P14	5	5	5	4	5
P15					5