THE SPECIFIC FUNCTIONS OF THE ORGANS AND TISSUES

1	Course Title:	THE SPECIFIC FUNCTIONS OF THE ORGANS AND TISSUES	
2	Course Code:	VBK6019	
3	Type of Course:	Optional	
4	Level of Course:	Third Cycle	
5	Year of Study:	1	
6	Semester:	1	
7	ECTS Credits Allocated:	3.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:		
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. Ümit Polat	
15	Course Lecturers:	Prof. Dr. Ümit Polat	
16	Contact information of the Course Coordinator:	Prof. Dr. Ümit Polat upolat@uludag.edu.tr 41283 B.U.Ü. Veteriner Fak. Biyokimya ABD. Bursa	
17	Website:		
18	Objective of the Course:	Learning the specific biochemical mechanisms of organs and tissues in living things	
19	Contribution of the Course to Professional Development:	Understanding of special biochemical mechanisms in living organism	
20	Learning Outcomes:		
		1	Detailed learning of cell building blocks and their functions
		2	Understanding the blood coagulation mechanisms
		3	To know the special functions of the liver and kidney
		4	Learning the urine formation mechanism and the functioning of muscle contractions
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21	Course Content:		

Course Content:

Week	Theoretical	Practice
1	The cell and subcellular components, nucleus, mitochondrium,microsomes, lysosomes, cytoplasm, cell membrane.	
2	Blood, blood components, erythrocytes, hemoglobine and their functions	

3	Blood plasma, coagulation factors, coagulation mechanism and factors affecting coagulation.	
4	Liver, role of liver in intermediate metabolism, biotransformation reactions, detoxification in chemical transformations	
5	Pathological biochemistry of liver, liver function tests and importance and clinical applications of liver function tests	
6	Foods, feeding, basal metabolism, digestive secretions, degradation and resorption of nutrients	
7	Anatomy, structure and functions of kidney, glomerular filtration, regulation of kidney functions	
8	Kidney function tests, clinical applications and importance of kidney function tests	
9	Physical and chemical properties, microscobical examination, formation of urine	
10	Connective tissue, intercellular matrix proteins, collagen biosynthesis, elastine and	
11	muscle contractions, stimulation and contraction of muscle	
12	White muscles, molecular mechanism of muscle relaxion, substrate metabolism in	
13	barrier, stimulation and neurotransmission	
14	General overview of topics	
15	Materials:	2001 Biyokimya L. Kalaycıoğlu, B. Serpek, M. Nizamlioğlu, N. Anatomy and Physiology of Farm Animals R.D. Frendson, 2003. Veterinary Pathophysiology (1st edition) Malbert CH., 2003 . Veterinary Hematology and Clinical Chemistry, Thrall MA., 2001
23	Assesment	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self-study and preperation	14	2.00	28.00
Homeworks	0	0.00	0.00
Projects	14	2.00	28.00
Field Studies	0	0.00	0.00
Midterm exam	0	0.00	0.00
Others	0	0.00	0.00
Final Exams	1	6.00	6.00
Total Work Load			90.00
Total work load/ 30 hr			3.00
ECTS Credit of the Course			3.00

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	0	0.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	100.00

Total	1	100.00
Contribution of Term (Year) Learning Activities to Success Grade		0.00
Contribution of Final Exam to Success Grade		100.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		Measurement and evaluation are performed according to the Rules & Regulations of Bursa Uludağ University on Undergraduate Education.

24 ECTS / WORK LOAD TABLE

25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS

	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	4	5	4	4	5	1	1	1	1	1	1	1	0	0	0	0
ÖK2	4	4	4	4	5	1	0	1	1	1	1	1	0	0	0	0
ÖK3	5	5	3	3	3	1	2	1	1	1	1	1	0	0	0	0
ÖK4	5	5	5	5	5	1	1	1	1	1	1	1	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**