ANATOMY AND PHYSIOLOGY

1	Course Title:	ANATOMY AND PHYSIOLOGY	
2	Course Code:	ZOO3417-S	
3	Type of Course:	Optional	
4	Level of Course:	First Cycle	
5	Year of Study:	3	
6	Semester:	5	
7	ECTS Credits Allocated:	3.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	2.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	none	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. NURTEN GALİP	
15	Course Lecturers:	Prof. Dr. Hüseyin YILDIZ	
16	Contact information of the Course Coordinator:	nurteng@uludag.edu.tr +90 224 294 12 73 Uludağ Üniv. Veteriner Fak. Fizyoloji Anabilim Dalı Bursa Turkey 16059	
17	Website:		
18	Objective of the Course:	The aim of course is to describe the anatomical concepts, the bones, cartilages, articulatio and muscles of animals. Also, to explain the visceral organs, nervous and aesteshiology systems. The aim of course is to describe the physiological concepts, the cell, body fluids and buffer systems and hormones. Also, to explain the blood physiology and respiratory, excretory, digestive nervous and muscle systems.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	To be able to describe general characteristics of animals.
		2	To be able to explain topographical meanings of organs.
		3	To be able to explain the morphological features of organs in the systems.
		4	To be able to explain the differents of morphological features of organs in the systems.
		5	To be able to explain organs which animals are contain.
		6	To be able to describe general physiological concepts, cell organels and cell physiology.
		7	To be able to explain body fluids and buffer system.
		8	To be able to explain the blood, functions of the blood and cardiovascular system mechanism.
		9	To be able to explain digestive and respiratory events in animal species, comparatively
		10	To be able to explain hormones and, nervous and muscle physiology in animals species, comparatively.
21	Course Content:		
	Course Content:		

Week	Theoretical	Practice
1	Introduction of Anatomy and basic directions General anatomic characteristics of animals and taxonomy.	Introduction of the anatomy laboratory equipments, cadaver preperation
2	The skeleton, bones characteristics and names of bones and differents of pecularities of bones	On the skeleton, bones are descriptive and named.
3	The clasification of articulatio and muscles of animals location of muscles, differents of pecularities of muscles.	Cadaver preperation and muscles location.
4	Topography and morphology digestive and respiratory systems organs in animals and differents.	The organs of this systems and morphological characteristics in cadavre
5	The urogenital system organs of animals and morphological characteristics in animal species.	Urogenital system organs in cadaver and location in animal species.
6	Overview of the cardiovascular system. Heart and basic arteries and veins. Overview of the Lymphatic system.	Heart location and pecularities, enjection veins, basic arteries in cadavre Lymph nodes in cadavre.
7	The nervous system anatomy; structure of the nervous system, General informations about some aesthesiology organs and their differences in animal species.	Comparation of central and peripheral organs of nervous systems in different cadavre. Some aesthesiology organs in cadavre
8	Introduction of Physiology and basic concepts The cell and physiological events of the cell Cell organels and functions Body fluids and buffer systems	Introduction of the physiology laboratory equipments
9	The blood, production of erythrocyte and blood cells Anemias Blood groups	Determination of hematocrit and hemoglobin.
10	Cardiovascular circulation and heart conduction system Introduction to digestive system	Counting erythrocytes and leukocytes - Formula of leukocytes Determination of clotting time and blood groups.
11	Digestive physiology in animal species Digestive organs and secretions of digestive Functions of the liver and bile	Ruminal fluid sampling Examination of physical properties of ruminal fluid
12	Overview of the digestive physiology in ruminants The rumen papillae and absorption Digestive events in the rumen	Experiment to test the liveliness of ruminal fluid and examination of protozoa
13	Overview of the respiratory physiology; respiratory organs and respiratory mechanisms Overview or the excretory physiology; functions of kidneys and renal metabolism Comparison of respiratory and excretory systems in animal species	Measurement of respiratory volumes and capacities with spirometer

14	The nervous system physiology; structure of the nervous system, action potentials and the central nervous system Muscle system physiology; the muscle cells, muscle contraction and metabolism Comparison of the nervous and muscle systems in animal species General informations about hormones, hormones and their differences in animal species.	Experiment of spinal reflexes

22	Textbooks, References and/or Other Materials:	1- ÖZGÜDEN, T., YILDIZ, B.: Anatomi-Fizyoloji. Ezgi Kitabevi, Bursa, 1998. 2- YILDIZ ,H.: Temel Veteriner Anatomi, Anadolu Üniv. Yayınları, Eskişehir, 2011 3- BAHADIR, A., YILDIZ, H.: Veteriner Anatomi, Ezgi Kitabevi, Bursa, 2010 4- YAMAN, K. Fizyoloji. Ezgi kitabevi, Bursa, 2004. 5- NOYAN, A. Yaşamda ve Hekimlikte Fizyoloji, Meteksan Ankara, 2005. 6- GUYTON, AC. HALL JE. Textbook of Medical Physiology, Saunders, 2005. 7- YILMAZ, B. Fizyoloji. Medisan Yayınevi, Ankara, 2000.
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		

24 ECTS / WORK LOAD TABLE

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	14	2.00	28.00
Self study and preperation	14	1.00	14.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	10.00	10.00
Others	0	0.00	0.00
Final Exams	1	10.00	10.00
Total Work Load			90.00
Total work load/ 30 hr			3.00
ECTS Credit of the Course			3.00

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	3	3	5	3	4	5	4	0	0	0	0	0	0
ÖK2	4	4	5	4	4	4	3	3	3	5	0	0	0	0	0	0
ÖK3	3	4	4	5	3	3	4	4	3	3	0	0	0	0	0	0
ÖK4	4	5	5	5	3	3	3	5	3	3	0	0	0	0	0	0
ÖK5	5	3	5	3	4	4	4	3	3	4	0	0	0	0	0	0
ÖK6	5	3	4	3	4	4	4	0	0	4	0	0	0	0	0	0
ÖK7	5	4	5	4	4	4	4	0	0	4	0	0	0	0	0	0
ÖK8	5	5	5	4	4	4	4	0	0	4	0	0	0	0	0	0
ÖK9	5	5	5	5	4	4	4	0	0	4	0	0	0	0	0	0
ÖK10	5	5	5	5	4	4	4	0	0	4	0	0	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

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