

ANATOMY AND PHYSIOLOGY IN FARM ANIMALS

1	Course Title:	ANATOMY AND PHYSIOLOGY IN FARM ANIMALS
2	Course Code:	ZOO2406
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	2
6	Semester:	4
7	ECTS Credits Allocated:	6.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	2.00
10	Laboratory (hour/week):	0
11	Prerequisites:	
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. AYŞE SERBEST
15	Course Lecturers:	Prof. Dr. NURTEN GALİP Uludağ Üniv. Veteriner Fak. Anatomi A.D. A Blok Görükle Kampüsü 16059 BURSA
16	Contact information of the Course Coordinator:	Doç.Dr. Gülsüm EREN eren@uludag.edu.tr +902242941227 Uludağ Üniv. Veteriner Fak. Anatomi A.D. A Blok Görükle Kampüsü 16059 BURSA
17	Website:	
18	Objective of the Course:	To teach the morphological characteristics of the motion systems of farm animals, the normal shape, structure, natural posture of internal organs and their relations with neighboring organs, and the morphological characteristics of circulation, nervous and sensory organs comparatively. Physiological concepts are to describe the cell, body fluids, buffer systems and hormones. In addition, to explain the physiology of blood and the digestive, respiratory, excretory, nervous, muscular and cardiovascular systems.
19	Contribution of the Course to Professional Development:	Learns the morphological features of the movement systems of farm animals, the normal shape, structure, natural stance and relations of the internal organs with neighboring organs, and the morphological features of the circulation, nervous and sensory organs comparatively, and an infrastructure is prepared for post-graduation profession with other vocational courses.
20	Learning Outcomes:	
	1	Learning anatomical features of farm animals in the zoological system.
	2	Learning the basic features of active and passive locomotor systems of farm animals.
	3	Learning the localization of the organs of the digestive, respiratory, urogenital, circulatory, nervous and sensory systems of farm animals, their normal shape, natural posture and their relations with neighboring organs.
	4	With the knowledge about the anatomy of farm animals, he can also use the anatomical approach in other vocational courses.
	5	To be able to describe general physiological concepts, cell organelles and cell physiology.
	6	To be able to explain body fluids and buffer system.

		7	To be able to explain the blood, functions of the blood and cardiovascular system mechanism.		
		8	To be able to explain digestive and respiratory events in animal species, comparatively		
		9	To be able to explain hormones and, nervous and muscle physiology in animals species, comparatively.		
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21	Course Content:				
	Course Content:				
Week	Theoretical		Practice		
1	Introduction to anatomy and terminology, definition and sections of systematic anatomy, definition and division of the locomotor system, Chondrologia,		Examination of anatomical directions, terminology and cartilages on cadavers and skeleton.		
2	Introduction to osteologia, Passive and active locomotor system		Examination of passive and active locomotor system on cadavers and skeleton		
3	Body cavities, digestive system organs and anatomy of farm animals		Examination of digestive system organs in cadavers		
4	Anatomy of the respiratory system and urinary system organs		Examination of respiratory and urinary system organs in cadavers		
5	Anatomy of the genital system organs, Blood Circulation and Lymph Circulation Anatomy.		Examination of genital system organs in cadaver Dissection of the heart and vessels and examination of lymph nodes.		
6	Anatomy of the nervous system and sensory organs		Examination of the organs of the nervous system and sensory organs in the cadaver		
Activites			Number	Duration (hour)	Total Work Load (hour)
Theoretical	The cell and physiological events of the cell		14	2.00	28.00
Practicals/Labs	Body fluids and buffer systems		14	2.00	28.00
Self study and preparation			12	3.00	36.00
Homeworks			0	0.00	0.00
Projects	Blood cells Anemias		10	6.00	60.00
Field Studies			0	0.00	0.00
Midterm exams			1	10.00	10.00
Others			0	0.00	0.00
Final Exams	Introduction to digestive system		Determination of clotting time and blood groups	18.00	18.00
Total Work Load					180.00
Total work load/30 hr	Digestive organs and secretions of digestive		Examination of physical properties of ruminal fluid		6.00
ECTS Credit of the Course					6.00
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
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22	Textbooks, References and/or Other Materials:	1.Bahadır A., Yıldız H., Veteriner Anatomi-Hareket Sistemi, Ezgi Kitapevi, Bursa, 2004. 2.Bahadır A., Yıldız H., Veteriner Anatomi-II, İç organlar, Ezgi Kitapevi, Bursa, 2005. 3- YAMAN, K. Fizyoloji. Ezgi kitapevi, Bursa, 2004. 4- NOYAN, A. Yaşamda ve Hekimlikte Fizyoloji, Meteksan Ankara, 2005. 5- GUYTON, AC. HALL JE. Textbook of Medical Physiology, Saunders, 2005. 6- YILMAZ, B. Fizyoloji. Medisan Yayınevi, Ankara, 2000.
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23	Assesment
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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	Multiple-choice midterm and final exams are held.	

24	ECTS / WORK LOAD TABLE
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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	3	3	3	3	3	4	4	4	4	3	0	0	0	0	0	0
ÖK2	3	3	3	3	3	3	4	4	3	3	0	0	0	0	0	0
ÖK3	4	4	4	3	3	4	4	3	2	3	0	0	0	0	0	0
ÖK4	4	4	4	3	3	4	4	3	4	3	0	0	0	0	0	0
ÖK5	5	3	4	3	4	4	4	1	1	4	0	0	0	0	0	0
ÖK6	5	4	5	4	4	4	4	1	1	4	0	0	0	0	0	0
ÖK7	5	5	5	5	4	4	4	1	1	4	0	0	0	0	0	0
ÖK8	5	5	5	5	4	4	4	1	1	4	0	0	0	0	0	0

ÖK9	5	5	5	5	4	4	4	1	1	4	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib ution Level:	1 very low		2 low		3 Medium		4 High		5 Very High							