BODY FLUIDS, ACID BASE BALANCE

1	Course Title:	BODY FLUIDS, ACID BASE BALANCE	
2	Course Code:	VFZ6009	
3	Type of Course:	Optional	
4	Level of Course:	Third Cycle	
5	Year of Study:	1	
6	Semester:	1	
7	ECTS Credits Allocated:	2.00	
8	Theoretical (hour/week):	1.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	none	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. Cenk AYDIN	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	Bursa Uludağ Üniversitesi Veteriner Fakültesi Fizyoloji Anabilim Dalı 16059 Nilüfer Bursa eposta: caydin@uludag.edu.tr tel:+90(224) 294-1274	
17	Website:		
18	Objective of the Course:	The aim of the course is to describe the issues related to acid base balance of body fluids and discuss.	
19	Contribution of the Course to Professional Development:	Find out about the problems associated with acid-base equilibrium in body fluids.	
20	Learning Outcomes:		
		1	To be able to analysis distribution of body fluıids.
		2	To be able to list of the body fluids composition
		3	To be able to describe the buffer system in body fluids
		4	To be able to explain the blood acid base balance and blood pH
		5	To be able to explain the transport of CO2 and O2 in blood.
		6	To be able to explain the gas exchange in tissues.
		7	To be able to explain the renal regulation of acid base balance
		8	To be able to describe the acidosis and alkalosis
		9	
		10	
21	Course Content:		

Course Content:

Week	Theoretical	Practice
1	Acids and Bases: Definitions and Meanings	

2	Buffer systems of body fluids To prevent changes in hydrogen ion density Lungs and kidneys	
3	The buffer systems: bicarbonate, phosphate, proteins buffer sytem	
4	Hydrogen ion concentration in the blood	
5	The blood pH and acid-base balance	
6	Amount and pressure of CO2 in the blood	
7	The gas exchange in tissues	
8	The transport of CO2 and O2 in the blood.	
9	Types of acidosis, causes	
10	Types of alkalosis, causes	
11	The respiratory regulation of acid-base balance	
12	The renal regulation of acid-base balance Secretion of hydrogen ions and reabsorbsion of bicarbonate ions in renal tubes	
13	Renal regulation of acidosis and alkalosis	
14	Mixed type of acid-base imbalance and the causes Clinical assessment of acid base balance in body fluids	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	1.00	14.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	1.00	14.00
Homeworks	2	1.00	2.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	0	0.00	0.00
Others	2	10.00	20.00
Final Exams	1	10.00	10.00
Total Work Load			60.00
Total work load/ 30 hr	75.00		2.00
ECTS Credit of the Course			2.00

2- MARIEB, EN. Human Anatomy & Physiology Laboratory Manual, Pearson, Benjamin Cummings, 2006.
Elsevier, USA, 2002.
4- NOYAN, A. Yaşamda ve Hekimlikte Fizyoloji, Meteksan

22	Assesment	
TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGH**
Quiz	0	0.00
Final Exam	1	75.00
Contribution of Term (Year) Learning Activities to Success Grade	25.00	
Contribution of Final Exam to Success Grade	75.00	
Total	100.00	
Measurement and Evaluation Techniques Used in the Course	Classical written exam will be applied.	

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	5	5	4	4	4	4	5	5	4	4	4	4	0	0	0	0
ÖK2	5	5	4	4	4	5	5	5	5	5	5	5	0	0	0	0
ÖK3	5	5	3	3	4	4	5	5	4	4	4	4	0	0	0	0
ÖK4	5	5	4	4	4	4	4	4	4	4	4	4	0	0	0	0
ÖK5	5	5	3	3	4	4	4	4	4	4	4	4	0	0	0	0
ÖK6	5	5	4	4	4	4	5	5	4	4	4	4	0	0	0	0
ÖK7	5	5	4	4	4	5	5	5	5	5	5	5	0	0	0	0
ÖK8	5	5	4	4	4	5	4	4	5	5	5	5	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	**1 very low**		**2 low**			**3 Medium**			**4 High**			**5 Very High**				