	NUTRITIONAL PHYSI	OLOG	BY, VITAMINS AND MINERALS					
1	Course Title:	NUTRITI	ONAL PHYSIOLOGY, VITAMINS AND MINERALS					
2	Course Code:	VFZ5024	ŀ					
3	Type of Course:	Optional						
4	Level of Course:	Second (	Cycle					
5	Year of Study:	1						
6	Semester:	2						
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 f	ace					
14	Course Coordinator:	Dr. Ögr.	Üyesi Füsun AK SONAT					
15	Course Lecturers:							
16	Contact information of the Course Coordinator:	fusunak@ +90 224 Uludağ Ü 16059	⊉uludag.edu.tr 294 1229 Iniv. Veteriner Fak. Fizyoloji Anabilim Dalı Bursa Turkey					
17	Website:	http://www.veteriner.uludag						
18	Objective of the Course:	The aim of the course is to have knowledge about nutritional physiology and to define and interpret vitamins and minerals.						
19	Contribution of the Course to Professional Development:	To increa nutritiona	ase the knowledge and experience of students about Il physiology.					
20	Learning Outcomes:							
		1	To be able to decribe classification of the energy content in foods					
		2	To be able to explain the a balanced diet					
		3	To learning the mechanisms that regulate food intake					
		4	To be able to explain the chewing methods according to animal species					
		5	To be able to decribe classification of vitamins and minerals					
		6						
		7						
		8						
		9						
		10						
21	Course Content:							
	<b>_</b>	Co	urse Content:					
Week	Theoretical		Practice					
1	Energy in food							
2	Balanced nutrition							
3	Regulation of food intake							
4	Neural centers regulating food intake	•						

5	Quantita	antitative factors that regulate food intake																
6	Nutrients chewing	s are t patter	aken i ms at o	nto the	e mout sheep	h and and h	norse											
7	Nutrients chewing	s are ta patter	aken i ms at e	nto the	e mout og and	h and poultr	у											
8	Ruminat	tion at	rumina	ants														
9	Obesity disease	in anir of obe	nals a sity	nd su	sceptib	oility to												
10	Starvatio	on and	cache	exia in	anima	als												
11	Vitamin riboflaviı	A, tian ne(vit I	nine (v 32)	rit B1)	, niacin	ie,												
12	Vitamin pantoter	B12, fe nic acie	olic ac d	id, pri	doxine	(vit B	6),											
13	Ascorbio	c acid,	vit D,	vit E,	vit K													
14	Mineral	metab	olism															
22	22 Textbooks, References and/or Other Materials:								<ol> <li>NOYAN, A. Yaşamda ve Hekimlikte Fizyoloji, Meteksan Ankara, 2005.</li> <li>GUYTON, AC. HALL JE. Textbook of Medical Physiology, Saunders, 2005.</li> <li>Mustafa TAŞKIN, Beslenme Fizyolojisi ve Biyokimyası, Turkiye Klinikleri Journal of Surgical Medical Sciences, 3: 18, 2007.</li> <li>Peter W.F. Fischer, Mary R. L'Abbé, Kevin A. Cockell, Rosalind S. Gibson, Trace Elements in Man and Animals</li> </ol>									
Activites							1	Numb	ber		Dura	Duration (hour) T			Total Work Load (hour)			
Theore	tical							Be	Besteme Fizyolojisi ve M Kitabi No 20, Gaziosma				letabolizma. Ikinci Basko Ders					
Practicals/Labs								0	0				0.00			0.00		
Sc23stu	Asamanp	<b>ee</b> þera	ation					1	14				1.00			14.00		
Homew	vorks							1	1			2.00			2.00			
Projects Midtern	, Fxam					0		06	0.00					0.00				
Field St	Field Studies								0			0.00			0.00			
Midtern Home v	lidterm exams								) 00			0.00			0.00			
Others	ere								2			10.00	)		20.00			
Final Ex	inal Exams 2								10.00					10.00				
Total Work Load															60.00			
Satalessic laad/ 30 hr															2.00			
ECTS Credit of the Course															2.00			
Total 100.00																		
Measurement and Evaluation Techniques Used in the classical exam Course																		
24	ECTS	/WO	RK L	OAD	TAB	LE												
25	25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																	
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16		
ÖK1	5	4	5	4	5	5	5	4	4	4	5	4	0	0	0	0		
ÖK2	5	5	5	5	5	5	5	5	4	5	5	5	0	0	0	0		

ÖK3	5	4	5	4	5	3	5	4	4	4	5	4	0	0	0	0
ÖK4	5	4	5	4	5	5	5	4	4	4	5	4	0	0	0	0
ÖK5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib ution Level:	rib 1 very low n el:			2 low		3 Medium		4 High		5 Very High						