

NUTRITIONAL PHYSIOLOGY, VITAMINS AND MINERALS

1	Course Title:	NUTRITIONAL PHYSIOLOGY, VITAMINS AND MINERALS	
2	Course Code:	VFZ5024	
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 face	
14	Course Coordinator:	Dr. Öğr. Üyesi Füsün AK SONAT	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	fusunak@uludag.edu.tr +90 224 294 1229 Uludağ Üniv. Veteriner Fak. Fizioloji Anabilim Dalı Bursa Turkey 16059	
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 increase the knowledge and experience of students about nutritional physiology.	
20	Learning Outcomes:		
		1	To be able to describe 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 describe classification of vitamins and minerals
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	Energy in food		
2	Balanced nutrition		
3	Regulation of food intake		
4	Neural centers regulating food intake		

5	Quantitative factors that regulate food intake	
6	Nutrients are taken into the mouth and chewing patterns at cattle, sheep and horse	
7	Nutrients are taken into the mouth and chewing patterns at cat, dog and poultry	
8	Rumination at ruminants	
9	Obesity in animals and susceptibility to disease of obesity	
10	Starvation and cachexia in animals	
11	Vitamin A, tiamine (vit B1), niacine, riboflavine(vit B2)	
12	Vitamin B12, folic acid, pridoxine (vit B6), pantotenic acid	
13	Ascorbic acid, vit D, vit E, vit K	
14	Mineral metabolism	

22	Textbooks, References and/or Other Materials:	1- NOYAN, A. Yaşamda ve Hekimlikte Fizyoloji, Meteksan Ankara, 2005. 2- GUYTON, AC. HALL JE. Textbook of Medical Physiology, Saunders, 2005. 3- Mustafa TAŞKIN, Beslenme Fizyolojisi ve Biyokimyası, Türkiye Klinikleri Journal of Surgical Medical Sciences, 3: 18, 2007. 4- Peter W.F. Fischer, Mary R. L'Abbé, Kevin A. Cockell, Rosalind S. Gibson, Trace Elements in Man and Animals,
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Activites		Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	14	1.00	14.00
Practicals/Labs	0	0	0.00	0.00
Self study and preparation	14	14	1.00	14.00
Homeworks	1	1	2.00	2.00
Projects	0	0	0.00	0.00
Midterm Exam	0	0	0.00	0.00
Field Studies	0	0	0.00	0.00
Midterm exams	0	0	0.00	0.00
Home work-project	1	1	2.00	2.00
Others	2	2	10.00	20.00
Final Exams	1	1	10.00	10.00
Total	2	2	10.00	10.00
Total Work Load				60.00
Contribution of Term (Year) Learning Activities to Total work load/ 30 hr				2.00
ECTS Credit of the Course				2.00

Total	100.00
Measurement and Evaluation Techniques Used in the Course	classical exam

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