N	EUROTRANSMITTER	AND	SINAPS ON NERVOUS SYSTEM						
1	Course Title:	NEUROT	RANSMITTER AND SINAPS ON NERVOUS SYSTEM						
2	Course Code:	VFZ5014							
3	Type of Course:	Optional							
4	Level of Course:	Second (Cycle						
5	Year of Study:	1							
6	Semester:	2							
7	ECTS Credits Allocated:	4.00							
8	Theoretical (hour/week):	1.00							
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. Murat YALÇIN							
15	Course Lecturers:								
16	Contact information of the Course Coordinator:	muraty@uludag.edu.tr +90 224 294 1228 Uludağ Üniversitesi Veteriner Fakültesi Fizyoloji Anabilim Dalı Görükle Bursa 16059							
17	Website:								
18	Objective of the Course:	This course focuses on the concept of neurotransmitters and synapse in nervous system							
19	Contribution of the Course to Professional Development:	As a veterinarian-physiologist, provides an approach to vitality phenomena in terms of the importance of electrical and chemical neurotransmission.							
20	Learning Outcomes:								
		1	Introduction to Neural Communication						
		2	Action Potentials						
		3	Synapses and Neuronal Integration						
		4	Neurotransmitters						
		5							
		6							
		7							
		8							
		9							
		10							
21	Course Content:								
	Course Content:								
Week	Theoretical		Practice						
1	Introduction to Neural Communicatio	n	Microdialysis from different brain areas						

2	Changes in membrane potential and movement during an action potential	ion	Microinjection to different brain area						
3	Structure of synapse		Microdialysis from different brain areas						
4	Events at a synapse		Microinjection to different brain area						
5	Excitatory and inhibitory synapses		Microdialysis from different brain areas						
6	Modulation of synaptic transmission		Microinjection to different brain area						
7	Postsynaptic potential; Summation		Microdialysis from different brain areas						
8	Action potential initiation at the axon		Microinjection to different brain area						
9	Role of neurotransmitters in the syna	ipse	Microdialysis from different brain areas						
10	Neuropeptides as neuromodulators		Microinjection to different brain area						
11	Presynaptic inhibition or facilitation		Microdialysis from different brain areas						
12	Receptors		Microinjection to different brain area						
13	Amino acid transmitters; Acetylcholin	ie	Microdialysis from different brain areas						
14	Catecholamines: Serotonin: Neuroay	/tive	Microiniection to diff	erent brain area					
Activit	ies		Number	Duration (hour)	Total Work Load (hour)				
Theore	Malterials:		2 174 and so RD, Wilk	w W1,0Eails AD, Anato	0m1y4.a00d				
Practic	als/Labs		14	2.00	28.00				
Self stu	dy and preperation		Departestic Animals 3rd Edition, USA, 2005. 28.00						
Homev	vorks		1	5.00	5.00				
Project	8		0	0.00	0.00				
Field S	tudies		0	0.00	0.00				
<i>Min</i>ate r		NUMBE R	wы́днт	0.00	0.00				
Others			3	10.00	30.00				
<u> Ginal e</u>	xams	0	0.00	15.00	15.00				
Total V	Vork Load				120.00				
<u></u> ⊧Ωtai ⊭	/ork.load/ 30 hr	1	75.00		4.00				
ECTS	Credit of the Course	_ ·	10100		4.00				
Contribution of Term (Year) Learning Activities to 2 Success Grade			25.00						
Contrib	oution of Final Exam to Success Grade	e	75.00						
Total			100.00						
Measu Course	rement and Evaluation Techniques Us	sed in the	Classical written exam						
24	ECTS / WORK LOAD TABLE								

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	4	4	5	5	4	4	5	4	5	5	0	0	0	0
ÖK2	5	4	4	4	5	5	4	4	5	4	5	5	0	0	0	0
ÖK3	5	4	4	4	5	5	4	4	5	4	5	5	0	0	0	0
ÖK4	5	4	4	4	5	5	4	4	5	4	5	5	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						