DIGESTIVE PHYSIOLOGY IN RUMINANTS

1	Course Title:	DIGESTIVE PHYSIOLOGY IN RUMINANTS	
2	Course Code:	VFZ6010	
3	Type of Course:	Optional	
4	Level of Course:	Third 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:	Prof. Dr. NURTEN YAKAR	
15	Course Lecturers:	Prof. Dr. Nurten GALİP	
16	Contact information of the Course Coordinator:	nurteng@uludag.edu.tr +90 224 294 1273 Uludağ Üniversitesi Veteriner Fakültesi Fizyoloji ABD Görükle Bursa 16059	
17	Website:		
18	Objective of the Course:	The aim of the course is to describe digestive system in ruminants and to explain presentation of digestive system, functions, rumen protozoa and bacterias.	
19	Contribution of the Course to Professional Development:	To increase the knowledge and experience of students about digestive system in ruminants.	
20	Learning Outcomes:		
		1	To be able to explain the digestive tract of ruminants
		2	To be able to describe rumen microorganisms
		3	To be able to explain digestion events in rumen
		4	To be able explain digestion and absorbtion in the intestines
		5	To be able to explain the importance of volatile fatty acids.
		6	To be able to describe physiopathology of ruminants
		7	To be able to describe the digestion differences between monogastrics and ruminants
		8	
		9	
		10	
21	Course Content:		
	Course Content:		

Week	Theoretical	Practice
1	Ruminants stomach and its development	
2	Salivary glands and secretes	
3	Rumen content Gas production Protein digestion Lipid hydrolysis Fermentation of carbonhydrates Synthesis of B vitamins	
4	Passage of food through the gastrointestinal tract Rumination	
5	Bile and pancreatic secretions Bile flow Secretions of pancreas	
6	Small and large intestines Bowel movements	
7	Development of ruminal papillae Rumen and reticulum absorption, Abomasus and omasus absorption	
8	[illegible]	
9	[illegible]	
10	Absorption of nutrients in the small intestine	
11	[illegible]	
12	[illegible]	
13	Physiopathologic conditions of digeston in	
14	Generaly comparison of digestion between	

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	1	2.00	2.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	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			2.00
ECTS Credit of the Course			2.00

	Materials:	Şti. Bursa, 2009. 2- Swenson, M. J. Duke's Physiology of Domestic Animals, 10. Ed. Cornell University, Press, Ithaca New York, 1984. 3-. Church D.C , Digestive Physiology and Nutrition of Ruminants, USA, Volume 1, 2, 3, 1978. 4-Reece W.O., Veteriner fizyoloji Dukes (Çeviri SedatYıldız, Medipres, Malatya).2008. 5- Bölükbaşı F.,Fizyoloji Ders Kitabı, Cilt 1, Ankara Ü., Veteriner Fak. Yayınları, Ankara, 1989.
23	Assesment	

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	30.00
Quiz	1	10.00

Home work-project	0	0.00
Final Exam	1	60.00
Total	3	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		test exam

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	5	5	5	5	5	5	5	5	5	5	0	0	0	0
ÖK2	5	5	3	4	4	5	4	4	5	5	4	4	0	0	0	0
ÖK3	5	5	3	5	5	5	4	4	4	4	5	5	0	0	0	0
ÖK4	4	4	3	4	4	5	4	4	4	4	4	4	0	0	0	0
ÖK5	4	4	3	5	5	5	5	5	5	5	5	5	0	0	0	0
ÖK6	5	5	3	4	4	5	4	4	5	5	4	4	0	0	0	0
ÖK7	5	5	3	5	5	5	5	5	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**