

RUMINANT NUTRITION

1	Course Title:	RUMINANT NUTRITION	
2	Course Code:	ZOO4406-Z	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	4	
6	Semester:	8	
7	ECTS Credits Allocated:	4.00	
8	Theoretical (hour/week):	2.00	
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. İsmail FİLYA	
15	Course Lecturers:	Prof. Dr. İbrahim Ak, Doç. Dr. Önder Canbolat	
16	Contact information of the Course Coordinator:	Bursa Uludağ Üniversitesi Ziraat Fakültesi Zootečni Bölümü, Görükle Kampüsü 16059 Bursa/TÜRKİYE ifilya@uludag.edu.tr, 0 224 2941555	
17	Website:	http://bilgipaketi.uludag.edu.tr/Ders/Index/1168827	
18	Objective of the Course:	Gains information about the nutrition of ruminants and contributes to their professional development.	
19	Contribution of the Course to Professional Development:	Learn about the nutrition of ovine and bovine livestock.	
20	Learning Outcomes:		
		1	Obtaining information about the digestive system and nutrient requirements of ruminant animals
		2	To have sufficient knowledge about nutrition of ruminant animals.
		3	To be able to apply new methods and approaches in nutrition of ruminant animals.
		4	To be able to follow scientific and technological developments in the nutrition of ruminants, to transfer innovations to animal production
		5	Obtaining information about nutrition and nutritional diseases
		6	Comprehending the legislation in the fields of animal production
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	Animal nutrition and developments in this field.	Digestive system in ruminants	
2	Basal metabolism in ruminants and factors affecting its measurement.	Evaluation of feed in ruminants	

3	Survival share protein requirement and affecting factors.	Digestion and evaluation of feed in ruminants		
4	Nutrition and nutrient requirements of pregnant animals	Feeds used in ruminant feeding		
5	Nutrition of animals in growth and development age.	Feeds to be used in rayon and points to be considered		
6	Feeding of growing and developing animals	Basic principles of ration preparation		
7	Nutrition of lactating animals and milk synthesis	Calculation of survival rate nutrient requirements		
8	Protein needs, energy and mineral-vitamin requirements of dairy cows	Calculation of yield share nutrient requirements		
9	Points to be considered in practical feeding of dairy cows.	Ration preparation methods (trial and error)		
10	Cattle fattening principles and methods	Ration preparation methods (pearson square method)		
11	Feeding the sheep	Ration preparation methods (algebraic method and linear programming)		
12	Feeding Goats	Ration preparation in computer environment		
13	Feeds used in ruminant feeding and feeding practices in different animal species	Ration preparation in computer environment		
14	Diseases caused by nutrition.	Ration preparation for beef cattle		
22	Textbooks, References and/or Other Materials:	Sevgican, F. 2001. Ruminantların beslenmesi (2. basım, Ders kitabı), E.Ü. Zir. Fak. Yayınları, no:524, s:228, İzmir. Kılıç, A., T. Demirkuş, M. Polat ve H. Özkul, 2002. Buzağı, Düve ve Boğaların Beslenmesi (Yardımcı Ders Kitabı), E.Ü. Zir. Fak. Yayınları, No: 540, Baskı: İzmir.		
Activites		Number	Duration (hour)	Total Work Load (hour)
Theoretical		14	2.00	28.00
Practicals/Labs		14	2.00	28.00
Self study and preperation		10	0.00	0.00
Homeworks		0	0.00	0.00
Projects		0	0.00	0.00
Field Studies		0	0.00	0.00
Midterm exams		2	15.00	30.00
Others		0	0.00	0.00
Final Exams		1	40.00	40.00
Total Work Load				156.00
Total work load/ 30 hr		R		4.20
ECTS Credit of the Course				4.00
Quiz		0	0.00	
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		It is evaluated according to the our university's undergraduate education and training regulations.		
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	0	0	5	0	0	0	0	0	0	3	0	0	0
ÖK2	5	0	5	0	0	5	0	0	0	0	0	0	4	0	0	0
ÖK3	5	0	4	0	0	5	0	0	0	0	0	0	3	0	0	0
ÖK4	5	0	5	0	0	5	0	3	0	0	0	0	4	0	0	0
ÖK5	5	0	4	0	0	5	0	0	0	0	0	0	4	0	0	0
ÖK6	5	0	4	0	0	5	0	0	0	0	0	0	3	5	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			