REPRODUCTIVE ENDOCRINOLOGY

1	Course Title:	REPRODUCTIVE ENDOCRINOLOGY	
2	Course Code:	VET4019	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	4	
6	Semester:	7	
7	ECTS Credits Allocated:	1.00	
8	Theoretical (hour/week):	1.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	No	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. ZEKARİYA NUR	
15	Course Lecturers:	Yok	
16	Contact information of the Course Coordinator:	Uludağ Üniversitesi Veteriner Fakültesi Dölerme ve Suni Tohumlamam Anabilim Dalı	
17	Website:		
18	Objective of the Course:	To give basic information in the field of endocrinology of reproduction in farm animals, to gain capability for appropriate diagnosis against clinical events and clinical uses of reproductive hormones and some biotechnological techniques theoretically and practically to the students by paying attention to the development of animal husbandry in our country	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	Synthesis, release, metabolism and mechanism of delivery to target tissue of reproductive hormones
		2	Effect of dysfunction of reproductive hormones and therapy
		3	Comparatively estrus and estrus cycle regulation in farm animals
		4	Fertilization, implantation, embryonic and fetal development, pregnancy and act of parturition
		5	Maternal recognition of pregnancy, sex differentiation, maintenance and termination of pregnancy via hormone
		6	Endocrine regulation of gametogensis
		7	Use of hormone for diagnosis and therapy and embryo transfer
		8	Endocrine, physiologic and behavioral changes during estrous, puberty and breeding season Enhancing reproductive performance of farm animals
		9	

	10	
21	Course Content:	
	Course Content:	
Week	Theoretical	Practice
1	Introduction, what are reproductive hormones, type of hormones and hormone release	
2	Hypothalamic hormones, target tissue and hypothalamic -hypophysial portal system	
3	Pituitary hormones FSH LH and target tissue	
4	Gonadotropins progesterone, estrogen and prostaglandins target tissue, follicular development, formation and regression of corpora lutea	
5	Effect of hormones produced by placenta	
6	Release and effect of prenatal and pre-pubertal reproductive hormones	
7	Pubertal endocrinology, photo period and season, and other reproductive hormones (PMSG, HCG, prostaglandins etc.)	
8	Male endocrinology, gametegenesiz, and	

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	0	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	1	6.00	6.00
Others	0	0.00	0.00
Final Exams	1	10.00	10.00
Total Work Load			30.00
Total work load/ 30 hr			1.00
ECTS Credit of the Course			1.00

follicular phase, ovulation, and effect of GnRH, FSH, LH progesterone

estrus cycle and estrus regulation, and estrous manipulation, follicular development,

ruminants

sow, estrus cycle, estrus regulation, and estrous manipulation, follicular development

13	Reproductive endocrinology in dog and queen, estrus cycle and estrus regulation, and estrous manipulation, follicular development, post-partum period and seasonality in don and queen	
14	Embryo transfer in cattle, and hormone therapy	

22	Textbooks, References and/or Other Materials:	1-Squires E.J. (2004): Aplied Animal Endocrinology.CABI Publishing, Oxon. 2-Blanchard T.L., Varner D.D., Schumacher J., Love C.C., Brinsko S.P., Rigby S.L. (2003): Manual of Equine Reproduction. Mosby, St.Louis. 3-Ball P.J.H., Peters A.R. (2004): Reproduction in Cattle. Blackwell Publishing, Oxford. 4-Bearden H.J., Fuquay J.W., Willard S.T. (2004): Applied Animal Reproduction. Pearson Prentice Hall, New Jersey. 5-Ley W.B. (2004): Broodmare Reproduction for the Equine Practitioner. Teton NewMedia, Wyoming. 6-Mitchell J.R., Doak G. A. (2004): The Artificial Insemination and Embryo Transfer of Dairy and Beef Cattle (including information pertaining to goats, sheep, horses swine, and other animals). Pearson Prentice Hall, New Jersey. 7-Feldman E. C., Nelson R. W. (2004): Canine and Feline Endocrinology and Reproduction. Saunders, St. Louis
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	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		

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	3	0	4	4	0	0	0	0	0	0	4	0	0	0	0	0
ÖK2	3	3	5	5	0	0	0	0	0	0	4	0	0	0	0	0
ÖK3	3	3	4	4	0	0	0	0	0	0	3	0	0	0	0	0
ÖK4	3	3	3	0	2	0	0	0	0	0	4	0	0	0	0	0
ÖK5	2	2	0	0	0	0	0	0	0	0	3	0	0	0	0	0
ÖK6	4	3	3	0	0	0	0	0	0	0	3	0	0	0	0	0
ÖK7	3	3	3	4	0	0	0	0	0	0	3	0	0	0	0	0
ÖK8	3	4	2	0	0	0	0	0	0	0	0	4	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

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