

# REPRODUCTION AND ARTIFICIAL INSEMINATION IN BUFFALO

1	Course Title:	REPRODUCTION AND ARTIFICIAL INSEMINATION IN BUFFALO	
2	Course Code:	VDT6021	
3	Type of Course:	Optional	
4	Level of Course:	Third Cycle	
5	Year of Study:	1	
6	Semester:	1	
7	ECTS Credits Allocated:	5.00	
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. SELİM ALÇAY	
15	Course Lecturers:	yok	
16	Contact information of the Course Coordinator:	salcay@uludag.edu.tr Tel: 0224-2941356	
17	Website:		
18	Objective of the Course:	To educate students who have knowledge about genital organs anatomy and their examination, the importance and situation of artificial insemination in animal husbandry, estrus symptoms and the determination methods of estrus, the optimum insemination time, semen collection methods, semen examination and evaluation, semen storage, artificial insemination methods and estrus synchronization methods in buffaloes	
19	Contribution of the Course to Professional Development:	To learn reproductive hormones and their classifications; To learn hormones secreted from pituitary gland; To learn hormones secreted from hypothalamus; To learn hormones secreted from gonads and placenta; To understand the classification of hormones; To learn how to use reproductive hormones in synchronization protocols	
20	Learning Outcomes:		
		1	To learn genital anatomy of cattle and morphological examination of genital organs of buffaloes;
		2	To understand the advantages and the disadvantages of the applications of artificial insemination and its importance for the development of animal breeding;
		3	To explain the estrus symptoms and the optimum insemination time in buffaloes;
		4	To have knowledge about semen collection techniques from buffaloes and its application and to make semen examination and evaluation;
		5	To have knowledge about short and long term storage of buffalo semen and to apply them;
		6	To understand and apply the most suitable techniques of artificial insemination in buffalo;
		7	To apply the synchronization of estrus cycles in buffaloes;
		8	
		9	

		10		
21	Course Content:			
	Course Content:			
Week	Theoretical	Practice		
1	Reproductive anatomy in buffalo	Examination of genital organs in buffalo		
2	Morphological examinations of buffalo genital organs	Andrological examination in buffalo		
3	Semen collection techniques from buffalo	Semen collection from buffalo		
4	Examination and evaluation of buffalo semen	Macroscopic ant microscopic examinations of buffalo semen		
5	Short term storage of buffalo semen	Short term storage procedures of buffalo semen		
6	Long term storage of buffalo semen	Long term storage procedures of buffalo semen		
7	Thawig of semen	Preparing of frozen buffalo semen for artificial insemination applications		
8	Estrus symptoms in buffaloes	Monitoring of estrus in buffaloes		
9	Estrus detecting techniques in buffaloes	Determination of estrus and rectal palpation		
10	Estrus synchronization	Application of estrus synchronization		
11	Optimum insemination time in buffalo	Determination of the optimum insemination time		
12	Recto-vaginal insemination method	Recto-vaginal insemination applications in buffalo		
13	Approaches for improving the pregnancy rates after artificial insemination	Intra uterin treatments after artificial insemination applications		
14	Determination methods of pregnancy	Pregnancy diagnosis		
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		34	1.00	34.00
Homeworks		0	0.00	0.00
Projects		0	0.00	0.00
Field Studies		0	0.00	0.00
Assesment		0	0.00	0.00
Midterm exams		0	0.00	0.00
Others		0	0.00	0.00
Final Exams		0	60.00	60.00
Total Work Load				150.00
Total work load/ 30 hr		0	0.00	5.00
Home work project		0	0.00	5.00
ECTS Credit of the Course				5.00
Total		1	100.00	
Contribution of Term (Year) Learning Activities to Success Grade		0.00		
Contribution of Final Exam to Success Grade		100.00		
Total		100.00		
Measurement and Evaluation Techniques Used in the Course		easurement and evaluation are performed according to the Rules & Regulations of Bursa Uludağ University on Undergraduate Education.		
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	1	2	5	5	3	0	3	0	0	0	0	0	0	0	0	0
ÖK2	1	1	1	4	3	4	3	3	3	1	1	0	0	0	0	0
ÖK3	4	2	0	4	4	2	5	0	0	0	0	0	0	0	0	0
ÖK4	1	2	5	0	0	0	4	0	0	0	0	0	0	0	0	0
ÖK5	2	3	5	0	1	1	4	0	0	0	0	0	0	0	0	0
ÖK6	2	4	0	5	5	4	4	0	0	0	0	0	0	0	0	0
ÖK7	5	4	0	5	5	4	5	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			