



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Estrus Detection and Time of Insemination							
Course Code		VST550		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	125 ( <i>Hours</i> )	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		In domestic animals, oestrus symptoms, oestrus behaviors, oestrus periods, oestrus presentation periods of animals and oestrus detection methods are evaluated.							
Course Content		It includes topics such as oestrus symptoms in domestic animals, oestrus behavior, oestrus periods, oestrus display periods of animals, and methods of oestrus detection.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion					
Name of Lecturer(s)		Prof. Ahmet CEYLAN							

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

### Recommended or Required Reading

1	Ball P.J.H., Peters A.R. (2004) Reproduction in Cattle. Blackwell Publishing, Oxford
2	Feldman E. C., Nelson R. W. (2004) Canine and Feline Endocrinology and Reproduction. Saunders, St. Louis
3	Hafez E.S.E., Hafez B. (2000) Reproduction in Farm Animals. Lippincott Williams & Wilkins, Philadelphia
4	Pineda M. H., Dooley M. P. (2003) McDonald's Veterinary Endocrinology and Reproduction, Iowa State Press, New York
5	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
6	Evans G., Maxwell WMC. (1987) Salamon's Artificial Insemination of Sheep and Goats. Butterworths, Sydney.

Week	Weekly Detailed Course Contents	
1	Theoretical	Detection of oestrus in cows
2	Theoretical	Detection of proper insemination time in cows
4	Theoretical	Detection of proper insemination time in ewes
5	Theoretical	Detection of oestrus in goats
6	Theoretical	Detection of proper insemination time in goats
7	Theoretical	Detection of oestrus in mares
8	Theoretical	Detection of proper insemination time in mares
9	Intermediate Exam	Midterm exam
10	Theoretical	Detection of oestrus in bitches
11	Theoretical	Detection of proper insemination time in bitches
12	Theoretical	Vaginal smear
13	Theoretical	Detection of oestrus in cats
14	Theoretical	Detection of proper insemination time in cats
15	Theoretical	Techniques for oestrus detection in other animals
16	Final Exam	Final term exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	5	0	5	25
Reading	14	0	2	28
Midterm Examination	1	16	2	18



Final Examination	1	24	2	26
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = ECTS				5
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	To get information about detection of oestrus
2	Techniques for oestrus detection
3	Economical importance of oestrus detection
4	Proper insemination time in domestic animals
5	Oestrus detection and its importance in artificial insemination

### Programme Outcomes (Reproduction and Artificial Insemination (Veterinary Medicine) Master)

1	To get knowledge about Reproduction and Artificial Insemination with theoretical lessons and practise
2	To get knowledge about reproductive systems of animals, reproductive organs and functions of these organs
3	To get knowledge about reproductive physiology of male and female animals, reproductive endocrinology, synchronisations and reproductive health
4	To get experience about diagnosis of oestrus, proper insemination time and method
5	To get experience to join reproductive scientific research, to follow scientific advances own field. To transfer all these experiences and knowledge to students and society
6	To gain ability to reach scientific references, to plan an experiment, study this experiment, evaluation of experimental results and compare this result similar experimental result
7	To get experience about cryopreservation and short term storage of sperm, examination of sperm
8	To get knowledge about reproductive biotechnology (artificial insemination, in-vitro fertilisation, freezing of sperm and embryo, embryo transfer, laparoscopic insemination). To Contribute and advance to science
9	To get knowledge about infertility, diagnosis of infertility, treatment of infertility in domestic animals especially commercial farms

### Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4
P1	4	4	4	4
P3	5	5	5	4
P4	5	5	5	5
P5	4	4	4	4
P6	3	3	3	3
P8	5	4	5	5
P9	5	5	5	4

