



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Control of Reproduction in the Companion Animals							
Course Code		VST626		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	4	Workload	100 ( <i>Hours</i> )	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		To give information about control of reproduction in companion animals especially in dogs and cats administration of medicines for this purpose. Indications and administration of this medicine							
Course Content		Control of reproduction in companion animals especially in dogs and cats advantages and disadvantages of reproduction control							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Individual Study					
Name of Lecturer(s)									

### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	Bearden H.J., Fuquay J.W., Willard S.T. (2004) Applied Animal Reproduction. Pearson Prentice Hall, New Jersey
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

Week	Weekly Detailed Course Contents	
1	Theoretical	Puberty and sexual maturity of pets
	Practice	Keeping under control of dog
2	Theoretical	Physiology of reproduction in dogs
	Practice	Examination of genital tract in dogs
3	Theoretical	Physiology of reproduction in cats
	Practice	Examination of genital tract in dogs
4	Theoretical	Hormonal mechanism of sexual cycle in bitches
	Practice	Vaginal examination
5	Theoretical	Hormonal mechanism of sexual cycle in cats
	Practice	Techniques for control of reproduction
6	Theoretical	Control of reproduction
	Practice	Techniques for control of reproduction
7	Theoretical	Advantage and disadvantage of reproduction control
	Practice	Administrations of reproductive hormones
8	Practice	Administrations of reproductive hormones
	Intermediate Exam	Midterm exam
9	Theoretical	Advantage and disadvantage of suppression of reproduction in dogs
	Practice	Keeping under control of cat
10	Theoretical	Termination of undesirable pregnancies in bitches
	Practice	Vaginal examination of cat
11	Theoretical	Induction of oestrus and ovulation in bitches
	Practice	Techniques for control of reproduction in bitches
12	Theoretical	Induction of oestrus and ovulation in cats
	Practice	Administrations of hormones
13	Theoretical	Advantage and disadvantage of suppression of reproduction in cats
	Practice	Induction of oestrus and ovulation in bitches and cats
14	Theoretical	Advantage and disadvantage of suppression of reproduction in cats



14	Practice	Induction of oestrus and ovulation in bitches and cats
15	Theoretical	Termination of undesirable pregnancies in cats
	Practice	Termination of undesirable pregnancies in cats and bitches
16	Final Exam	Final term exam

**Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Lecture - Practice	14	0	2	28
Assignment	2	0	5	10
Reading	14	0	1	14
Midterm Examination	1	14	1	15
Final Examination	1	17	2	19
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4

\*25 hour workload is accepted as 1 ECTS

**Learning Outcomes**

1	To get information about physiology of reproduction in pets
2	Control of reproduction
3	Advantages and disadvantages of reproduction control
4	Control of reproduction in pets
5	Pet animals and breeding areas and environmental effects

**Programme Outcomes** (*Reproduction and Artificial Insemination (Veterinary Medicine) Doctorate*)

1	To get knowledge about reproduction and artificial insemination with theoretical lessons and practise, also to get knowledge about reproductive systems of animals, reproductive organs and functions of these organs
2	Hormonal mechanisms of oogenesis and spermatogenesis, movements of oocyte and sperm cells in the genital tracts, factors affecting spermatogenesis and oogenesis, blood-testis barrier, functions of epididymidis, capacitation and acrosome reaction of sperm cells, fertilization (fusion, activation, penetration)
3	To get knowledge about reproductive anatomy of male and female animals, reproductive endocrinology, embryonic development of gonads, prenatal development, development-regression and luteolysis of corpus luteum, histological, anatomical and physiological structure of uterus, fertilization, early embryonic development, luteal mechanism, implantation, involution of uterus post partum, sperm migration in cervical mucus, oogenesis, acrosomal enzymes, fusion, activation, penetration, syngamy and polyspermy and reproductive health
4	To get ample information about the structure and functions of hormones related to reproduction and diagnosis of oestrus, proper seeding time and gain experience in the selection of the technique in domestic animals
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	Systematic of special examination, morphological and functional examination of genital organs, microbiological examination of sperm cells, ultra structure characteristics of sperm cells, factors affecting sperm quality, spermatological examination, Short term storage and cryopreservation of sperm cells, cryopreservation methods, factors affecting the success of thawing sperm cells, manipulations applied before or after thawing
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
10	To make a research about reproduction and artificial insemination, this can contribute and advance to science
11	To get experience about to write a national or international article about reproduction and artificial insemination, this can contribute and advance to science

**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
P2	4			
P3	4			
P6		4		

