



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Reproduction and Artificial Insemination in Cats							
Course Code		VST649		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 reproduction and artificial insemination in cats							
Course Content		Reproduction in cats, physiology of reproduction, collection of sperm, preparation of artificial insemination catheter, preparation of female cat for insemination, artificial insemination with fresh, chilled and frozen sperm							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion					
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	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 in cats
	Practice	Oestrus in cats
2	Theoretical	Reproductive physiology in cats
	Practice	Oestrus symptoms in cats
3	Theoretical	Hormonal mechanism of sexual cycle in cats
	Practice	Detection of oestrus
4	Theoretical	Sexual cycle in cats
	Practice	Vaginal examination
5	Theoretical	Detection of oestrus in cats
	Practice	Vaginal smear
6	Theoretical	Control of reproduction
	Practice	Vaginal smear
7	Theoretical	Advantages and disadvantages of reproductive control
	Practice	Staining of vaginal smear slides
8	Practice	Staining of vaginal smear slides
	Intermediate Exam	Midterm exam
9	Theoretical	Collection of sperm
	Practice	Induction of ovulation
10	Theoretical	Detection of insemination time
	Practice	Collection of sperm
11	Theoretical	Vaginal smear
	Practice	Collection of sperm
12	Theoretical	Artificial insemination with fresh semen
	Practice	Examination of sperm
13	Theoretical	Induction of ovulation after insemination
	Practice	Artificial insemination with fresh semen
14	Theoretical	Termination of undesirable pregnancies in cats
	Practice	Artificial insemination with frozen thawed sperm



15	Theoretical	Termination of undesirable pregnancies in cats
	Practice	Induction of ovulation after insemination
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	3	0	4	12
Reading	14	0	1	14
Midterm Examination	1	12	1	13
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 cats
2	Control of reproduction
3	Collection of sperm
4	Examination of sperm
5	Artificial insemination in cats

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	L5
P1	4			4
P4		4		
P7			4	
P8		4		4

