



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Examination of the Sperm							
Course Code		VST506		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	125 (<i>Hours</i>)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		To give information about inspection methods in order to determine all features forming fertility and their evaluation in terms of fertility							
Course Content		spermological examinations							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Discussion, Individual Study					
Name of Lecturer(s)		Lec. Niyazi KÜÇÜK							

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Alaçam E.: Evcil Hayvanlarda Reprodüksiyon, Suni Tohumlama, Doğum ve İnfertilite. First Edition, Konya, 1994
2	Evans G., Maxwell WMC. (1987) Salamon's Artificial Insemination of Sheep and Learn possible complications of early and late inseminationsd Goats. Butterworths, Sydney
3	Hafez E.S E., Hafez B. (2000) Reproduction in Farm Animals. Lippincott Williams & Wilkins, Philadelphia

Week	Weekly Detailed Course Contents	
1	Theoretical	Benefits of sperm examination
	Practice	Laboratory practise
2	Theoretical	Macroscopic examination of sperm
	Practice	Collection of sperm from different species and macroscopic examination of sperm
3	Theoretical	Examination of sperm motility
	Practice	Microscopic examination
4	Theoretical	Detection of sperm concentration
	Practice	Morphological examination
5	Theoretical	Morphological examination of sperm
	Practice	Morphological examination
6	Theoretical	Sperm staining procedures
	Practice	Staining procedures for sperm
7	Theoretical	Detection of Live – dead sperm rate
	Practice	Staining procedures for sperm
8	Practice	Staining procedures for sperm
	Intermediate Exam	Midterm exam
9	Theoretical	Detection and agglutination of other cells in semen
	Practice	Laboratory practise
10	Theoretical	Physical and chemical examination of sperm
	Practice	Laboratory practise
11	Theoretical	Biochemical examination of sperm
	Practice	Laboratory practise
12	Theoretical	Microbiological examination of sperm
	Practice	Taking sample from semen for microbiological analyses
13	Theoretical	Sperm parameters according to different species
	Practice	Microscopic perspective of sperm
14	Theoretical	Examination of frozen thawed sperm



14	Practice	Examination of frozen thawed sperm
15	Theoretical	Determination of DNA fragmentations in sperm
	Practice	Determination of DNA fragmentation in sperm
16	Final Exam	Final term exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Reading	14	0	2	28
Midterm Examination	1	14	1	15
Final Examination	1	25	1	26
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = ECTS				5

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	to be able to define macroscopic and microscopic sperm examination
2	to be able to comprehend evaluation of fertilization ability of sperm
3	to be able to analyse microbiological, physical and chemical examination of sperm
4	to be able to identify the determination of sperm DNA integrity
5	To have knowledge about the methods of detection of spermatozoon membrane damage.

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	5	4	4	4
P3	4			
P5	5	5	5	5
P6	4	4	4	4
P7	5	4	5	5
P8	5	4	4	4
P9	4	4	4	4

