

### AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Reproduction and Artificial Insemination in Poultries							
Course Code		VST638		Couse Level		Third Cycle (Doctorate Degree)			
ECTS Credit 2		Workload	50 (Hours)	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		To give information about reproduction and artificial insemination in poultries							
Course Content		Reproduction in poultries, collection of sperm, artificial insemination methods, insemination dosage and time in poultries							
Work Placement N/A		N/A							
Planned Learning Activities and T		and Teaching	Methods	Explanation	(Presenta	tion), Demonst	ration, Indiv	idual 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	Pineda M. H., Dooley M. P. (2003) McDonald's Veterinary Endocrinology and Reproduction, Iowa State Press, New York
3	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

Week	Weekly Detailed Cour	se Contents				
1	Theoretical	Anatomy of genital tract in females				
	Practice	Examination of genital tract in females				
2	Theoretical	Anatomy of genital tract in males				
	Practice	Examination of genital tract in males				
3	Theoretical	Physiology of reproduction in poultries				
	Practice	Collection of sperm				
4	Theoretical	Gamatogenesis				
	Practice	Collection of sperm				
5	Theoretical	Spermatogenesis				
	Practice	Collection of sperm				
6	Theoretical	Collection of sperm				
	Practice	Examination of sperm				
7	Theoretical	Hormonal control of reproduction in poultries				
	Practice	Examination of sperm				
8	Practice	Artificial insemination in chickens				
	Intermediate Exam	Midterm exam				
9	Theoretical	spawning				
	Practice	Artificial insemination in chickens				
10	Theoretical	Detection of the most proper insemination time in poultries				
	Practice	Artificial insemination in ducks				
11	Theoretical	Artificial insemination in chickens				
	Practice	Artificial insemination in ducks				
12	Theoretical	Fertilization				
	Practice	Artificial insemination in turkeys				
13	Theoretical	Artificial insemination in turkeys				
	Practice	Artificial insemination in goose				
14	Theoretical	Kazlarda suni tohumlama				
	Practice	Artificial insemination in goose				



15	Theoretical	Artificial insemination in quails	
	Practice	Artificial insemination in quails	
16	Final Exam	Final term exam	
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# **Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload	
Lecture - Theory	14	0	1	14	
Lecture - Practice	14	0	2	28	
Midterm Examination	1	3	1	4	
Final Examination	1	3	1	4	
	50				
[Total Workload (Hours) / 25*] = <b>ECTS</b>					
*25 hour workload is accepted as 1 ECTS					

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## Learning Outcomes

1	To get information about reproductive tract of male and female in poultries			
2	Physiology of reproduction in poultries			
3	Collection of sperm in poultries			
4	Artificial insemination in poultries			
5	Semen collection and storage methods in poultry			

#### 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 epidydymidis, 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 polispermy 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
P2		5	4	4
P3	4			
P7			4	4

