AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Selection Methods								
Course Code	VZO501		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	5	Workload	120 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	The aim of the course is to teach the selection principles of livestock for breeding to be carried out the variations considered in genotype so as to better different production traits in animal breeding programmes.								
Course Content	The purpose of selection and its importance, variation and variation types, heritability degree, breeding value, genetic progress, selection limit, selection methods and principles used for improvement of one or more production traits.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Individual Study								
Name of Lecturer(s)	Prof. Evrim DERELİ FİDAN, Prof. Hüsnü Erbay BARDAKÇIOĞLU								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Bourdon, M. R. (2000): Understanding Animal Breeding. Second ed. Prentice Hall, upper Saddle River, New Jersey
2	Kinghorn, B., Van der Werf J., Ryan, M. (2000): Animal Breeding. The Post Graduate Faundation in Veterinarian Science of the University of Sydney.
3	Kumlu, S., (2003): Hayvan Islahı.Türkiye Damızlık Sığır Yetiştiricileri M., Ankara.
4	Willis, B. M. (1991): Dalton's Introduction to Practical Animal Breeding. Third ed. Oxford Blackwell Scientific Publications. London

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition of selection and its importance and objectives in animal breeding, phenotypic and genotypic variation
2	Theoretical	Gene balance of population , Hardy-Weinberg Law, heritability and its traits
3	Theoretical	Genetic progress
4	Theoretical	Genetic progress
5	Theoretical	Selection methods
6	Theoretical	Phenotypic selection
7	Theoretical	Pedigree selection
8	Intermediate Exam	Midterm exam
9	Theoretical	Family selection
10	Theoretical	Progeny test
11	Theoretical	Progeny test
12	Theoretical	Selection in the order
13	Theoretical	Selection according to the barrage method
14	Theoretical	Index selection
15	Theoretical	General Interview of subjects
16	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	3	0	10	30
Reading	1	0	40	40
Midterm Examination	1	10	1	11

Final Examination	1	10	1	11
			Total Workload (Hours)	120
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	to know the aim of selection and its importance
2	to do successfully sorting the animals in herd
3	to know and apply the selection methods required for one production trait
4	to know and apply together selection methods of more traits
5	to comment the results of selection and select of livestock for breeding

Programme Outcomes *(Animal Science (Veterinary Medicine) Master)*	
1	Knows basic principles of animal rearing and breeding.
2	Knows physiological and morphological traits of farm animals. He/she can achieve a successful herd management by means of transferring his/her knowledge to the rural area.
3	Knows management of the animals and can take required measurements in the farm. He/She controls the productivity in the farm and keeps all farm records.
4	Knows selection and culling methods.
5	He/She can involve in all stages of production in the farm. Knows how to establish and manage of farm enterprises. He/She can help to the entrepreneurs who will enter the farm business.
6	He/She can detect and eliminate hereditary defects and problems by using his/her basic genetic knowledge.
7	Knows production traits due to his/her knowledge about hereditary principles. He/She can achieve heifer selection and determine breeding strategies for maximum production.
8	He/She can involve as an expert in scientific researches, breeding programs and judicial issues with his/her knowledge about race determination, parenthood tests, blood groups etc.
9	Knows how to reach resources and knows selection criterions of scientific researches. He/She can systematically present data. Knows statistical concepts and how to can get data, and present those as figures and tables and how to comment them. Knows different statistical methods. He/She can design a topic as a scientific paper.
10	Knows animal behaviours. Knows legal directives about animal welfare and can design some facilities such as housing, feeding, transferring and slaughtering processes according to these directives.

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

	L1	L2	L3	L4	L5
P1	1	1	1	1	1
P2	1	1	1	1	1
P4	5	5	5	4	4
P5	2	1	1	1	1
P6	3	2	2	2	2
P7	2	2	2	4	4
P9	2	2	2	2	2