AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Development of Diagnosis Methods in Brucella Infections								
Course Code	MİK548		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	4	Workload	100 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	The objective of this course is to give information about development of diagnosis methods in Brucella infections.								
Course Content	Species that cause Brucellosis and their infections; staining methods used in laboratory diagnosis of brucella species; microbiological culture; biochemistriycal and antigenic characteristics used in identification; Phage sensitivity; stain tolerance tests; serological tests								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, Discussion, Case Study								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	40
Quiz	2	20
Assignment	2	20

Recommended or Required Reading	
1	Koneman's Color Atlas and Textbook of Diagnostic Microbiology
2	Handbook of Microbiological Media, 4º Edition
3	Veterinary Vaccines and Diagnostics, Volume 41
4	Veterinary Immunology: An Introduction, 7º Edition
5	Veteriner Bakteriyoloji
6	İmmunoloji

Week	**Weekly Detailed Course Contents**	
1	Theoretical	Species that cause Brucellosis and their infections
2	Theoretical	Species that cause Brucellosis and their infections
3	Theoretical	Staining methods used for diagnosis of Brucella infections
4	Theoretical	Staining methods used for diagnosis of Brucella infections
5	Theoretical	Culture media used for diagnosis of Brucella infections
6	Theoretical	Culture techniques used for diagnosis of Brucella infections
7	Theoretical	Biochemical characteristics used for identification
8	Intermediate Exam	Midterm Examination
9	Theoretical	Antigenic characteristics used for identification
10	Theoretical	Antigenic characteristics used for identification
11	Theoretical	Phage sensitivity tests used for identification
12	Theoretical	Staining tolerance tests used for identification
13	Theoretical	Serological tests used for identification
14	Theoretical	Serological tests used for identification
15	Theoretical	Discussion

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Assignment	2	5	1	12
Laboratory	14	0	0.5	7

Quiz	2	5	1	12
Midterm Examination	1	5	1	6
Final Examination	1	5	2	7
			Total Workload (Hours)	100
			[Total Workload (Hours) / 25*] = **ECTS**	4
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	1. To be able to describe the development of diagnosis methods in Brucella infections
2	2. To be able to list staining methods used for diagnosis methods in Brucella infections
3	3. To be able to apply serological methods in Brucella infections
4	4. To be able to use the necessary information
5	To be able to laboratory diagnosis of Brucella species.

Programme Outcomes *(Microbiology Master)*	
1	Department has the ability to identify and apply information about bacteriology, virology, mycology and has the ability to recognize diseases about veterinary medicine.
2	Department has the ability to take the advantage of technology and has the ability to diagnose, treat and prevent the diseases by using appropriate equipments.
3	Department has the ability to analyze the epidemiological compounds of an animal population and has the ability to get precautions.
4	Department has the ability to test or analyze the diseases and has the ability to evaluate the results.
5	Department has the ability to perform, produce and conclude projects for scientific researches
6	Department has the ability to donate theoretical and practical knowledge about postgraduate students in the are of microbiology.
7	Graduate students has the ability to perform scientific researches.

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	4	5	5	5	5
P2	4	5	5	5	5
P3	5	4	5	4	4
P4	4	4	4	5	4
P5	5	5	5	4	3
P6	4	4	3	5	5
P7	5	5	5	4	4