AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Special Laboratory Applications								
Course Code	MİK529		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	5	Workload	125 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	The objective of this course is to give information about special laboratory applications.								
Course Content	ELISA (Enzyme linked immunusorbent assay), RIA (Radioimmunoassay), CFT (Complement fixation test), hemaglutination, hemaglutination inhibition, immunodiffusion (Agar Gel Precipitation, immunoelectrophoresis, zone electrophoresis), immunohystochemical techniques (direct and indirect immunoflourescence). Immunofleurosence technique. Diagnosis of listeria, legionella, Rabies, streptecocus and chlamydia.								
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	10
Assignment	2	10

Recommended or Required Reading	
1	Koneman's Color Atlas and Textbook of Diagnostic Microbiology
2	Bergey's manual of systematic bacteriology
3	Handbook of Vertebrate Immunology
4	Veterinary Laboratory Medicine
5	The ELISA Guidebook
6	Temel Mikrobiyoloji
7	İmmunoloji

Week	Weekly Detailed Course Contents	
1	Theoretical	Enzyme Linked Immunosorbent Assay test
2	Theoretical	Radio Immuno Assay test
3	Theoretical	Complement fixation test
4	Theoretical	Hemaglutination test
5	Theoretical	Hemaglutination inhibition test
6	Theoretical	Agar-gel precipitation test
7	Theoretical	Immunoelectrophoresis
8	Intermediate Exam	Midterm Examination
9	Theoretical	Direct and indirect immunoflorescanse test
10	Theoretical	Immunoflorescanse techniques
11	Theoretical	Diagnosing Listeria infections
12	Theoretical	Diagnosing Legionella infections
13	Theoretical	Diagnosing Rabies infections
14	Theoretical	Diagnosing Streptococcus and Chlamydia infections
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	4	2	12
Laboratory	14	0	1	14
Reading	1	0	25	25
Quiz	2	1	1	4
Midterm Examination	1	5	1	6
Final Examination	1	7	1	8
			Total Workload (Hours)	125
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	1. To be able to define special laboratory applications
2	2. To be able to define ELISA, RIA and CF tests
3	3. To be able to define hemagglutinatiın, hemagglutination inhibition, immunodiffusion tests
4	4. To be able to name immunohistochemical techniques
5	5. To be able to define the diagnoses of Listeria, Legionella, Rabies, Streptococcus infections
6	6. To be able to use the necessary information

Programme Outcomes *(Microbiology (Veterinary Medicine) Master's Without Thesis)*	
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.

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

	L1	L2	L3	L4	L5	L6
P1	5	4	4	4	5	4
P2	5	5	4	4	5	4
P3	4	4	4	5	5	5
P4	5	5	5	5	5	4
P5	4	5	5	4	4	5