AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Bacterial Diseases in the Fish					
Course Code		MİK538		Couse Level	Second Cycle (Master's Degree)		
ECTS Credit	5	Workload	130 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		The objective of this course is to give information about bacterial diseases of fish.					
Course Content		Bacteriological culture and identification of pathogenic fish bacteria. Biochemical identification tests, Technical methods, Preperation of media for culture, Techniques for the molecular identification of pathogenic fish bacteria.					
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	1	20
Assignment	1	20

Recommended or Required Reading

1	Koneman's Color Atlas and Textbook of Diagnostic Microbiology
2	Bergey's manual of systematic bacteriology
3	Bacterial Fish Pathogens: Disease of Farmed and Wild Fish
4	Veteriner Bakteriyoloji

Week	Weekly Detailed Course Contents	
1	Theoretical	Culture and identification of pathogenic fish bacteria
2	Theoretical	Culture and identification of pathogenic fish bacteria
3	Theoretical	Culture and identification of pathogenic fish bacteria
4	Theoretical	Biochemical identification tests
5	Theoretical	Biochemical identification tests
6	Theoretical	Technical methods
7	Theoretical	Technical methods
8	Intermediate Exam	Midterm Examination
9	Theoretical	Preparing media for culture
10	Theoretical	Preparing media for culture
11	Theoretical	Molecular identification of pathogenic fish bacteria
12	Theoretical	Molecular identification of pathogenic fish bacteria
13	Theoretical	Molecular identification of pathogenic fish bacteria
14	Theoretical	Molecular identification of pathogenic fish bacteria
15	Theoretical	Discussion

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Assignment	1	1	1	2
Laboratory	14	0	0.5	7
Reading	2	0	25	50
Quiz	1	1	1	2

Midterm Examination	1	5	1	6
Final Examination	1	6	1	7
			Total Workload (Hours)	130
			[Total Workload (Hours) / 25*] = **ECTS**	5

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	1. To be able to define bacterial diseases of fish
2	2. Having information about culture and identification of pathogen fish bacteria
3	3. Providing ability to evaluate these informations
4	To know bacterial fish vaccines.
5	Diagnosis of bacterial fish diseases.

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
P1	5	5	4	5	4
P2	5	4	4	4	4
P3	5	5	5	4	5
P4	4	4	4	4	4
P5	3	3	3	3	3