AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Helminths, Arthropods, Protozoans Of Fishes								
Course Code	VPR506		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	5	Workload	122 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	Tha aim of the course is to have an advanced understanding of important diseases of fishes caused by helminths, arthropods and protozoans, symptoms of diseases they cause, symptoms, methods used for the diagnosis, treatment and control for these diseases.								
Course Content	Important diseases of fishes caused by helminths, arthropods and protozoans, transmission routes of parasitic zoonoses, symptoms of diseases they cause, methods used for the diagnosis, treatment and control for these diseases.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study, Individual Study								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Quiz	2	10
Assignment	4	10

Recommended or Required Reading	
1	Burgu, A., Karaer, Z. (2005). Parazit Hastalıklarında Tedavi. Türkiye Parazitoloji Derneği, Yayın No:19.
2	Williams, H., Jones, A. (1994). Parasitic Worms of Fish. London, Taylor & Francis,593 p.
3	Woo, P.T.K. (1995). Fish Diseases and Disorders. Wallingford, Oxon, UK, CAB International, 808 p.
4	Leatherland, J.F., Woo, P.T.K., Bruno, D. W. (2004). Fish diseases and disorders. Wallingford, Oxon, UK, New York, NY, USA, CABI Pub. V 2-3.

Week	Weekly Detailed Course Contents	
1	Theoretical	Protozoan infections of fishes; trypanoplasmosis, trypanosomosis, crytobiosis
2	Theoretical	Protozoan infections of fishes; ichtiyobododsis, hexamitosis
3	Theoretical	Protozoan infections of fishes; coccidiosis, microsporosis
4	Theoretical	Protozoan infections of fishes; myxosporidiosis, Ichthyophithirisosis
5	Theoretical	Protozoan infections of fishes; Chilodonellosis, trichodiosis
6	Theoretical	Apiosomosis, oodinosis
7	Theoretical	Helmith infections of fishes; Trematodes: Dactylogyrosis, Grydactylosis, Discocotylosis
8	Intermediate Exam	Midterm exam
9	Theoretical	Helminth infections of fishes; Trematodes: Diplozoonosis, Sanguinicolosis, Diplostomatosis
10	Theoretical	Helminth infections of fishes; Cestodes: Khawiosis, Eubothriosis, Cyathocephalosis
11	Theoretical	Helminth infections of fishes; Cestodes: Bothriocephalosis, Triaenophorosis, Proteocephalosis
12	Theoretical	Helminth infections of fishes; Cestodes: Ligulosis, Digrammosis, Schistocephalosis, Diphyllobothriosis
13	Theoretical	Helminth infections of fishes; Nematodes: Capillariosis, Anisakiosis, Camallanosis, Philometroidosis,
14	Theoretical	Acanthocephala infections of fishes; fish leeches
15	Theoretical	Crustasean infections of fishes: Ergasilosis, Synergolosis, Lernaeosis, Argulosis
16	Final Exam	Final exam
17	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	4	0	5	20

Reading	14	0	2	28
Quiz	2	4	0.5	9
Midterm Examination	1	15	1	16
Final Examination	1	20	1	21
			Total Workload (Hours)	122
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To be able to explain about the diseases caused by helminths, arthropods and protozoans in fishes.
2	To be able to tell about the infection routes of important parasites of fishes, symptoms and economical aspects of diseases they cause.
3	To be able to recognize the available control methods for these diseases.
4	To be able to express the rules and regulations to be complied with in aquaculture.
5	To know the treatment methods of these diseases.

Programme Outcomes *(Parasitology (Veterinary Medicine) Master)*	
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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	5	5	5
P2	4	4	2	1	4
P3	5	4	3	4	5
P4	5		4	3	5
P5	4	4	4	5	4
P6	3	3	3	2	3
P7	4	4	4	5	3
P8	4	4	4		2
P9	5	5	3	2	3
P10	4	4			3
P11	4	4	4		
P12					1