

# FISH PARASITOLOGY

1	Course Title:	FISH PARASITOLOGY
2	Course Code:	BIO 5511
3	Type of Course:	Optional
4	Level of Course:	Second Cycle
5	Year of Study:	1
6	Semester:	1
7	ECTS Credits Allocated:	6.00
8	Theoretical (hour/week):	3.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. F.NACI ALTUNEL
15	Course Lecturers:	
16	Contact information of the Course Coordinator:	Prof. Dr. F. Naci ALTUNEL altunel@uludag.edu.tr 0224 2941784 Uludağ Üniversitesi, Fen – Edebiyat Fakültesi, Biyoloji Bölümü, 16059, Nilüfer-Bursa
17	Website:	
18	Objective of the Course:	It is aimed that the important helminth, protozoon and Arthropod species of fishes, the infection of diseases originated these species, the diagnosis, the protection and the importance in terms of public health.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	They have knowledge of parasitism, ectoparasite and endoparasite concepts.
	2	They have knowledge about life style of parasites and their intermediate hosts, methods which are used identification.
	3	They know formation mechanism of illnesses by parasite on fishes.
	4	They have knowledge of methods which are used parasite identification (ecto and endo methods).
	5	They have knowledge of important ecto and endo fish parasites, identification parasitic disease and disease diagnosis, treatment and the protection.
	6	They learn identification of some protozoon parasite species on fishes with parasitic characteristics, the diagnosis, the protection and the importance in terms of human health.
	7	They learn identification of some Helminth parasite species on fishes with parasitic characteristics, the diagnosis, the protection and the importance in terms of human health.
	8	They learn identification of some Arthropod parasite species on fishes with parasitic characteristics, the diagnosis, the protection and the importance in terms of human health.

		9	They have knowledge about life style of parasites and their effects on fishes.	
		10	They have knowledge about the parasites which have medical importance.	
21	Course Content:			
	Course Content:			
Week	Theoretical	Practice		
1	The students learn style of the course programme. The students are illuminated about final exam.			
2	Explaining the parasitism, ectoparasite and endoparasite concepts.			
3	Life styles of parasites and their intermediate hosts, methods which are used identification.			
4	Effects of parasites on fishes, mechanism of illnesses by parasite on fishes, methods which are used.			
5	Explaining the methods which are used parasite identification (ecto and endo methods).			
6	Explaining the important ecto and endo parasites.			
7	Explaining the some protozoon parasite species on fishes with parasitic characteristics, the diagnosis, the protection and the importance in terms of human health			
Activites		Number	Duration (hour)	Total Work Load (hour)
Theoretical		14	3.00	42.00
Practicals/Labs		0	0.00	0.00
Self study and preparation		14	4.00	56.00
Homeworks		5	16.00	80.00
Projects		3	10.00	30.00
Field Studies		0	0.00	0.00
Midterm exams		0	0.00	0.00
Others		0	0.00	0.00
Final Exams		1	32.00	32.00
Total Work Load				240.00
Total work load/30 hr				8.00
ECTS Credit of the Course				6.00
	on fishes.			
13	The medically important parasites.			
14	Explaining the protection and the treatment of fish parasites.			
22	Textbooks, References and/or Other Materials:		1-Olsen W. O.,1974. Animal Parasites Their Life Cycles and Ecology.Dover Publications, Inc., New York. 2- Harris C. L. 1992. Concepts in Zoology. Harper Collins Publishers. New York. 3-Hoffman G. L., Meyer F. P., 1974. T. F. H. Publications, Inc. England. 4-Dogiel V. A., Petrushevski G. K. And Polyanski Yu. L.1970. Parasitology of Fishes. T. F. H. Publications, England. 5-Kabata Z., 1970. Diseases of Fishes. T. F. H. Publications, England.	

23	Assesment	
TERM LEARNING ACTIVITIES	NUMBE R	WEIGHT
Midterm Exam	0	0.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	100.00
Total	1	100.00
Contribution of Term (Year) Learning Activities to Success Grade		0.00
Contribution of Final Exam to Success Grade		100.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		

<b>24</b>	<b>ECTS / WORK LOAD TABLE</b>
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25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	4	1	4	5	3	5	4	5	3	0	0	0	0	0	0	0
ÖK2	3	2	4	5	3	5	4	5	4	0	0	0	0	0	0	0
ÖK3	5	1	4	5	2	5	4	4	3	0	0	0	0	0	0	0
ÖK4	4	3	5	5	3	4	4	4	4	0	0	0	0	0	0	0
ÖK5	5	1	5	5	3	5	4	4	3	0	0	0	0	0	0	0
ÖK6	5	2	5	5	3	5	4	5	5	0	0	0	0	0	0	0
ÖK7	4	3	4	5	3	5	4	5	5	0	0	0	0	0	0	0
ÖK8	5	3	4	5	3	4	4	5	4	0	0	0	0	0	0	0
ÖK9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives    PQ: Program Qualifications																
Contribution Level:	1 very low		2 low		3 Medium		4 High		5 Very High							