	DISEASES OF CR	USTA	CEAN AND ARTHROPODS						
1	Course Title:	DISEASES OF CRUSTACEAN AND ARTHROPODS							
2	Course Code:	VSH 60 ⁷	18						
3	Type of Course:	Optional							
4	Level of Course:	Third Cy	rcle						
5	Year of Study:	1							
6	Semester:	2							
7	ECTS Credits Allocated:	3.00							
8	Theoretical (hour/week):	2.00							
9	Practice (hour/week):	0.00							
10	Laboratory (hour/week):	0							
11	Prerequisites:	-							
12	Language:	Turkish							
13	Mode of Delivery:	Face to face							
14	Course Coordinator:	Prof. Dr. Soner Altun							
15	Course Lecturers:								
16	Contact information of the Course Coordinator:	Prof. Dr. Soner ALTUN Veteriner / Klinik Öncesi Bilimler / Su Ürünleri Hastalıkları							
17	Website:	http://veteriner.uludag.edu.tr/index.html							
18	Objective of the Course:	To give informations about basic principles of fisheries production and to teach students the aetiology, epizootiology, pathogenesis, laboratory diagnosis, prevention and control of bacterial, viral, fungal, parasitological, neoplastic diseases, as well as nutritional and metabolic disturbances and toxications in productible fishes.							
19	Contribution of the Course to Professional Development:								
20	Learning Outcomes:								
		1	1. the parasitological diseases of fish and other fisheries, gains knowledge about the diagnosis, treatment and prophylaxis of these diseases						
		2	2. the bacterial, viral and fungal diseases of fish and other fisheries, gains knowledge about the laboratory diagnosis, treatment and prophylaxis of these diseases						
		3	3. the aetiology, pathogenesis, macroscopic and microscopic diagnosis of infectious, nutritional, metabolic, toxicological and neoplastic diseases of fish and other other fisheries						
		4	how to describe lesions of these diseases and prepare oral and written reports						
		5							
		6							
		7							
		8							
		9							
		10							
21	Course Content:								
		Co	ourse Content:						
Week	Theoretical Practice								

1	Basic biological and physiological features of productible fisheries (Rainbow trout, Seabream, Seabass, Shrimp, mussel, oyster, crayfish and lobster)			
2	Basic principles of Rainbow trout, Seabream, bream and Seabass production			
3	Basic principles of Shrimp, mussel, oyster, crayfish and lobster production			
4	Systematical examination methods in Fish diseases a) Antemortem examination in fishes, Postmortem examination in fishes b) Inspection in fishes, Visceral organs examination in fishes			
5	Transport procedure of sick fish and tissue samples in diagnosis of fish diseases			
6	Bacterial fish diseases: aetiology, epizootiology, pathogenesis, clinical and necropsy findings, microbiological diagnosis, prevention and control strategies of furunculosis, columnaris disease, peduncle disease (cold water disease), bacterial gill disease, bacterial fin disease			
7	Bacterial diseases: aetiology, epizootiology, pathogenesis, clinical and necropsy findings, microbiological diagnosis, prevention and control strategies of bacterial hemorrhagic			
Activit	es	Number	Duration (hour)	Total Work Load (hour)
Theore	isathogenesis, clinical and necropsy findings,	14	2.00	28.00
Practic	als/Labs	14	2.00	28.00
Self stu	disandepreteration	14	1.00	14.00
Homev	vorks	0	0.00	0.00
Project	control strategies of viral hemorrhagic	0	0.00	0.00
Field S	tudies	0	0.00	0.00
Midterr	What the fact of carp, infectious salmon anaemia,	1	10.00	10.00
Others		0	0.00	0.00
Final E	19mphocystis disease, stomatopapilloma and	1	10.00	10.00
Total V	/ork Load			90.00
Total w	Ork lobological diagnosis, prevention and			3.00
ECTS	Credit of the Course			3.00
	fever diease, channel catfish virus disease, lymphocystis disease, stomatopapilloma and fish pox			
11	Fungal diseases: pathogenesis, clinical, necropsy findings, prevention and control strategies of, saprolegniasis, ichtiyosporidiosis, branchiomycosis, streptomycosis and crayfish plague. Nutritional, toxic and some noninfectious diseases in fish.			
12	Protozoan infections of freshwater and seawater fish			
13	Plathelmithes and nemathelminthes parasitizing freshwater and seawater fish			

14	Imp nem shel	portant protozoan, plathelmithes and mathelminthes infections in molluscs and ellfish																	
22	Text Mat	Textbooks, References and/or Other Materials:								 Woo P.T.K., Bruno D.W.: Fish Diseases and Disorders, Vol. 3, Viral, Bacterial and Fungal Infections, , CABI Publishing, UK, 1999 Buller, N.B : .Bacteria from Fish and Other Aquatic Animals , CABI Publishing, UK, 2004 Arda M., Seçer S., Sarıeyyüboğlu M.: Balık Hastalıkları, Medisan Yayın. No: 61; Ankara, 2005 Pike A.W., Lewis J.W. : Parasitic Diseases of Fish, , Samara Publishing Ltd., 1994 Roberts R.J. : Fish Pathology, W.B. Saunders Harcourt Publishers Ltd., London, 2001 Erer , H. : Balık Hastalıkları , Selçuk Üniversitesi Basım Evi, Konya, 2002 Düzel S. Paraziter Balık Hastalıkları. Mersin Üniv. Yayınları, 2002 									
23	Assesment																		
TERM L	RM LEARNING ACTIVITIES							NUMBE R	E WI	WEIGHT									
Midtern	n Exa	am						1	30	30.00									
Quiz								1	10	10.00									
Home v	Home work-project						()	0.0	0.00									
Final E	Final Exam 1						1	60	60.00										
Total	Total 3							10	100.00										
Contribution of Term (Year) Learning Activities to Success Grade						40	40.00												
Contribution of Final Exam to Success Grade						60	60.00												
Total							10	100.00											
Measurement and Evaluation Techniques Used in the Course						ne													
24	EC	TS /	WO	RK L	OAD	TAB	LE												
25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																			
		PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1	PQ11	PQ12	PQ1	PQ14	PQ15	PQ16		
ÖK1		5	5	4	4	3	4	2	1	3	3	4	2	3 0	0	0	0		
ÖK2		4	5	4	3	4	3	2	3	2	5	2	4	0	0	0	0		
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OK3		3	4	5	3	4	5	2	5	4	4	2	4	0	0	0	0		
ÖK4		4	4	4	3	4	3	5	4	5	4	4	2	0	0	0	0		
			I	-0: L	earr	ning C)bje	ctive	s F	PQ: P	rogra	ım Qu	alifica	tions					
Contrib ution Level:1 very low			2 low 3 M			Med	ium	n 4 High			5 Very High								