AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Fish Physiology						
Course Code	VFZ531		Couse Level	Second Cycle (Master's Degree)			
ECTS Credit	4	Workload	100 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	To be informed about the physiological mechanisms of fish						
Course Content	General characteristics of the fish, the fish of vital regulatory mechanisms necessary for the vital activities (survival), behavior, reproduction						
Work Placement	N/A						
Planned Learning Activities and Teaching Methods			Explanation (Presentation), Demonstration, Discussion, Individual Study				
Name of Lecturer(s)							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	38
Final Examination	1	60
Quiz	2	1
Term Assignment	1	1

Recommended or Required Reading

1	Bone Q., Moore R.H. (2008). Biology of Fishes 3th Ed. Taylor & Francis Group
2	Eckert Animal Physiology. Mechanisms and Adaptations. 4th Ed., New York
3	Environmental Physiology of Animals. 2nd Ed. Blackwell Publishing
4	Respiratory Physiology of Vertebrates. Life with and without Oxygen. Cambridge Uni. Press

Week	Weekly Detailed Course Contents	
1	Theoretical	Classification and nomenclature in fish -I
2	Theoretical	Classification and nomenclature in fish -II
3	Theoretical	The fish that can be livied in different environments and the biology of fishes. The balance and swimming of fish
4	Theoretical	Gase exchange and circulatory system in fish
5	Theoretical	Osmoregulation and ione balance in fish
6	Theoretical	Nutrition and digestion in fish
7	Theoretical	Reproduciton
8	Theoretical	Midterm
9	Theoretical	Sensory system and communication in fish
10	Theoretical	Endocrine system in fish
11	Theoretical	Nervous system of fish
12	Theoretical	Immune system
13	Theoretical	Behavior
14	Theoretical	Presentations-I
15	Theoretical	Presentations-II

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Assignment	4	4	1	20
Term Project	1	16	1	17
Quiz	2	2	1	6
Midterm Examination	1	5	1	6

Final Examination	1	8	1	9
			Total Workload (Hours)	100
			[Total Workload (Hours) / 25*] = **ECTS**	4
25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	To be informed about the life cycle of fish
2	To learn about the processes in the maintenance of homeostasis in fish
3	To be informed about reproduction and behavior in fish
4	To be informed about immunology and nervous system in fish
5	To be informed about sensoriy processes in fish

Programme Outcomes *(Physiology (Veterinary Medicine) Master)*

1	Understands and defines the interdisciplinary interaction with the associated fields
2	Uses theoretical and practical information learned in the education
3	Creates solution proposals by using background education
4	Combines and interprets the information from different disciplines, and creates solution proposals and scientific information to contribute the solution process, when needed
5	Involves in professional organizations and institutions related with the educational background
6	Takes responsibility for individual and group work, and do the assignments in line with the skills
7	Communicates with the professionals out of the field when it is necessary, and contributes to the solution as a team member
8	Understands the production and publishing methods of scientific information
9	Determines the source and the type of information that is needed related with the field and chooses the activities that s/he wants to participate, by using his/her critical thinking abilities that is developed in the education
10	Excels technological devices both for professional and social purposes
11	Compiles any kind of data related with the field (field observations, produced scientific information etc.) and analyzes and interprets the results according to the aims of the research
12	Determines the environmental health rules and applies them for prevention
13	Applies the knowledge gained in professional level with the awareness of the needs of the region and the country, and develops a defense capability
14	Conceptualizes the phenomena and the events related with the field, studies scientific methods and techniques, interprets results; analyzes and hypothesizes methods in accordance with the results and designs solution or treatment alternatives addressing the problems
15	Follows up the updates of information in the field by using all kinds of sources (scientific information, legislations etc.), and uses when needed

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	2	2	2	2	2
P2	4	4	4	4	4
P3	4	4	4	4	4
P4	2	2	2	2	2
P5	3	3	3	3	3
P6	1	1	1	1	1
P7	1	1	1	1	1
P8	1	1	1	1	1
P9	2	2	2	2	2
P10	1	1	1	1	1
P11	4	4	4	4	4
P12	1	1	1	1	1
P13	4	4	4	4	4
P14	1	1	1	1	1
P15	3	3	3	3	3