ICHTYOLOGY

1	Course Title:	ICHTYOLOGY	
2	Course Code:	BYL4033	
3	Type of Course:	Optional	
4	Level of Course:	First Cycle	
5	Year of Study:	4	
6	Semester:	7	
7	ECTS Credits Allocated:	4.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	2	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. Hikmet Sami Yıldırımhan	
15	Course Lecturers:	Prof. Dr. Hikmet Sami YILDIRIMHAN	
16	Contact information of the Course Coordinator:	Uludağ Üniversitesi Fen-Edebiyat Fakültesi Biyoloji Bölümü Görükle Kampüsü, Nilüfer/BURSA 16059 e-posta: yhikmet@uludag.edu.tr Telefon: 0 224 294 17 90 Uludag University Faculty of Arts and Science Department of Biology Gorukle Campus, Nilufer/BURSA 16059 e-mail: yhikmet@uludag.edu.tr Phone: 0 224 294 17 90	
17	Website:		
18	Objective of the Course:	To teach the students details of systematic and some techniques used in biology. To give lecture and to do practical studies to the students on macroscopic and microscopic features of the fish. Morphological features of jawless, cartilaginous and bony fishes, body shapes, fins, scales, skeleton systems, muscles, digestive system, respiration system, nervous system, endocrine system, sense and light organs. The habitat of fish, reproduction in fish, growth, diet, adaptation and migration.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	The students learn characteristics of systematic.
		2	They learn fish situation among other animals.
		3	They learn fishes which distributed in the world especially in Turkey.
		4	They learn detail knowledges as to basic characteristics of fishes.
		5	They learn some methods which are used for biology.
		6	They learn knowledges about classification of fishes.
		7	Taxonomic, ecologic and geographic distrubution
		8	They descripe basic concepts about ichthyology.
		9	They determine adaptations to enviroment in fish.

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21	Course Content:

Course Content:

Week	Theoretical	Practice
1	The students learn style of the course programme. The students are iluminated about midterm and final exams. Adaptations to water life, fish morphology.	
2	Giving detail knowledges about morphologic, systematic characteristics of fishes. Mouth, nasal organ, eye in fishes.	
3	Giving knowledges about fishes in our country and world. Fins and caudal fin types in fishes.	
4	The types of dorsal and anal fins.	
5	The types of paired and anal fins.	
6	Skin and scale types of fish.	
7	Colors, skeleton and axis skeloton in fishes.	
8	Skeleton of organs, muscle system.	
9	Midterm exam and subject repetition	
10	Nervous system in fish, hearing organ, tasting organ.	
11	Digestive system, swim bladder, respiratory	
13	Reproduction hormones, reproduction, copulation.	
	development.	
	Materials:	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	14	2.00	28.00
Self study and preperation	3	5.00	15.00
Homeworks	3	5.00	15.00
Projects	1	15.00	15.00
Field Studies	0	0.00	0.00
Midterm exams	1	2.00	2.00
Others	1	15.00	15.00
Final Exams	1	2.00	2.00
Total Work Load			122.00
Total work load/ 30 hr			4.00
ECTS Credit of the Course			4.00

Tome II, fase 2
Nouvelle histoire naturelle pes poissons. Traduite et
Ecology of teleost fishes, Chapman and hall, Robert J. WOOTTON
KNOR
Developmental Biology, Sinaeur Associates, Inc.,
Arıncı, K. ve Elhan, A. 1983. Anatomi Terimleri Kılavuzu. 5. baskı, Hacettepe Taş Kitapçılık Ltd. Şti., 145 s.
Anakara Univ. Basımevi, Ankara, 174 s.
Çelikkale, M.S. 1986. Balık Biyolojisi. Karadeniz Üniversitesi Sürmene Deniz Bilimleri ve Teknolojisi Yüksek Okulu. Genel Yayın No:101, Yüksek Okul Yayın No: 1, Trabzon, 387 s.
Demir. N. 2006. İhtiyoloji. (Ed., Karataş, M.), Nobel Yayın Dağıtım, Ankara, 423 s.
Geldiay, R. ve Balık, S. 1999. Türkiye Tatlısu Balıkları. 3. baskı, Ege Üniversitesi Basımevi, 532 s.

23	Assesment

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	25.00
Quiz	1	15.00
Home work-project	0	0.00

Final Exam	1	60.00
Total	3	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		

24	ECTS / WORK LOAD TABLE

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	4	5	5	0	0	0	0
ÖK2	3	2	4	5	3	5	4	5	4	4	5	5	0	0	0	0
ÖK3	5	1	4	5	2	5	4	4	3	5	5	5	0	0	0	0
ÖK4	4	3	5	5	3	4	4	4	4	5	5	5	0	0	0	0
ÖK5	5	1	5	5	3	5	4	4	3	4	5	5	0	0	0	0
ÖK6	5	2	5	5	3	5	4	5	5	5	5	5	0	0	0	0
ÖK7	4	3	4	5	3	5	4	5	5	5	5	5	0	0	0	0
ÖK8	5	3	4	5	3	4	4	5	4	5	5	5	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**