BIOLOGICAL OSEANOGRAPHY

1	Course Title:	BIOLOGICAL OSEANOGRAPHY	
2	Course Code:	BIO5311	
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:		
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Doç. Dr. GAMZE YILDIZ	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	gamze@uludag.edu.tr 0 224 29 41 867 / 718 Uludağ Üniversitesi Fen Edebiyat Fakültesi Biyoloji Bölümü, 16059, Nilüfer-BURSA	
17	Website:		
18	Objective of the Course:	To provide a basic understanding of the biological processes in the water column and how these are affected by the ambient physicochemical conditions.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	Be able to define the major forms of life in the sea, and describe how these forms relate to each other ecologically.
		2	Be able to explain how marine organisms influence cycling of bioelements.
		3	Be able to describe prominent characteristics of the primary marine habitats.
		4	Be able to define processes that control the biomass, growth, and productivity of organisms in the marine environment
		5	Be able to describe methodological approaches appropriate for evaluating the biomass, growth, and mortality of plankton, nekton, and sessile marine organisms.
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21	Course Content:		

Course Content:

Week	Theoretical	Practice

1	Basic ecological terms, historical development of biological oceanography	
2	Ecological classification of marine environments and marine organisms	
3	Abiotic environment: Radiation, temperature, salinite	
4	Abiotic environment: Density, Pressure, surface current	
5	Phytoplankton and primary production	
6	Marine zooplankton	
7	Midterm exam	
8	Energy flow and mineral cycling	
9	Nectonic organisms	
10	Benthic organisms	
11	Benthic communities; intertidal environment, rocky shores, kelp forests, sand beaches	
12	Benthic communities; coral reefs, mangroves	
13	Deep sea ecology	
14	Human impacts on marine biota	

22	Textbooks, References and/or Other Materials:	Carol M Lalli, Timothy R. Parsons. Biological oceanography an introduction, Elsevier, second edition
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	35.00
Quiz	0	0.00
Home work-project	1	5.00
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**

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	4.00	56.00
Homeworks	4	10.00	40.00
Projects	2	5.00	10.00
Field Studies	2	7.00	14.00
Midterm exams	1	10.00	10.00
Others	0	0.00	0.00
Final Exams	1	4.00	4.00
Total Work Load			176.00
Total work load/ 30 hr			5.87
ECTS Credit of the Course			6.00

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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK5	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**				