

# THE STRUCTURE AND REPRODUCTION OF ALGAE

1	Course Title:	THE STRUCTURE AND REPRODUCTION OF ALGAE
2	Course Code:	BIO6301
3	Type of Course:	Optional
4	Level of Course:	Third 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:	Dr. Öğr. Üyesi DİDEM KARACAOĞLU
15	Course Lecturers:	Prof. Dr. Gamze YILDIZ
16	Contact information of the Course Coordinator:	<p>Dr. Öğr. Üyesi Didem KARACAOĞLU  Uludağ Üniversitesi Fen-Edebiyat Fakültesi Biyoloji Bölümü  Görükle Kampüsü, Nilüfer/BURSA 16059  e-posta: didemk@uludag.edu.tr  Telefon: 0 (224) 294 1867</p> <p>Uludag University Faculty of Arts and Science Department of Biology  Gorukle Campus, Nilufer/BURSA 16059  e-mail: didemk@uludag.edu.tr  Phone: 0 (224) 294 1867</p>
17	Website:	
18	Objective of the Course:	The aim of the course is to explain basic concepts of general characteristics and reproduction of algae. The goals are to provide students with basic knowledge in algal distribution, taxonomic and morphologic diversity and life cycles of algae.
19	Contribution of the Course to Professional Development:	Learns the general characteristics and reproductive structures of algae groups belonging to various divisions. By using the knowledge they have learned to identify algal groups at taxonomic levels, they can apply them in biological diversity inventory and monitoring studies.
20	Learning Outcomes:	
	1	Be able to describe algal classification and taxonomical diversity
	2	Be able to describe the structure and functions of reproductive cells at microalgae
	3	Be able to understand vegetative, asexual and sexual reproduction of microalgae
	4	Be able to discuss external and intrinsic factors that influence algal reproduction
	5	Be able to compare reproductive cells of different microalgae groups

		6	Be able to use identification keys		
		7	Be able to define identify terms for algae		
		8	Be able to distinguish between the different taxonomic groups of microalgae		
		9			
		10			
21	Course Content:				
	Course Content:				
Week	Theoretical		Practice		
1	Algae, their origins and fosil history of algae				
2	Algal classification and taxonomical diversity				
3	Structural properties of algal cells				
4	Structure of cell wall, chloroplast, flagella and mitacondri among algal groups				
5	Midterm exam,answer of exam questions and general discussion				
6	Vegetative, asexual and sexual reproduction of algae				
Activites			Number	Duration (hour)	Total Work Load (hour)
Theoretic	Coccolithales, Conjugales, Siphonales, Charales)		14	3.00	42.00
Practicals/Labs			0	0.00	0.00
Self study and preparation	Xanthophyceae, Heterochloridales, Heterococcales, Heterotrichales,		10	3.00	30.00
Homeworks			5	10.00	50.00
9	Classification and structural properties of Chrysophyceae (Chrysomonadales		2	11.00	22.00
Field Studies			2	6.00	12.00
10	Classification and structural properties of Dinophyceae		1	5.00	5.00
Others			2	7.00	14.00
11	Classification and structural properties of Cryptophyceae (Cryptomonadales,		1	5.00	5.00
Total Work Load					185.00
12	Classification and structural properties of Dinophyceae				6.00
ECTS Credit of the Course					6.00
	Chloromonadineae				
14	Classification and structural properties of Euglenineae				
22	Textbooks, References and/or Other Materials:		F.E. Fritsch. 1971. The Structure and Reproduction of the Algae. Volume I. Cambridge University Press, 791 p.		
23	Assesment				
TERM LEARNING ACTIVITIES		NUMBE R	WEIGHT		
Midterm Exam		1	40.00		
Quiz		0	0.00		
Home work-project		0	0.00		
Final Exam		1	60.00		

Total	2	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	The system of relative evaluation is applied.	

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