

LICHEN ECOLOGY

1	Course Title:	LICHEN ECOLOGY
2	Course Code:	BIO6106
3	Type of Course:	Optional
4	Level of Course:	Third Cycle
5	Year of Study:	1
6	Semester:	2
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:	There is no prerequisite for this course.
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. ŞABAN GÜVENÇ
15	Course Lecturers:	Prof.Dr. Şule ÖZTÜRK
16	Contact information of the Course Coordinator:	Prof.Dr. Şaban GÜVENÇ E-mail:saban@uludag.edu.tr Telefon: +90 (224) 2941793 Adres: Uludağ Üniversitesi, Fen – Edebiyat Fakültesi, Biyoloji Bölümü, Görükle Kampüsü, 16059 Nilüfer/Bursa.
17	Website:	
18	Objective of the Course:	Aim of this course, the ecological point of students are evaluate the distribution and roles in the ecosystem of lichens and determine the effects on lichen distribution of global warming.
19	Contribution of the Course to Professional Development:	Contributes to the student's professional development by evaluating lichens ecologically, their distribution on the earth and their roles in the ecosystem, and the effects of global warming on lichens.
20	Learning Outcomes:	
	1	To understand and apply the main concepts, principles and theories of lichen ecology.
	2	To learn analyze lichenobiota and lichen communities, regularities of species distribution and conservation.
	3	Knowledge on the ecological importance and contribution to the ecosystem of lichens.
	4	To analyze the effects of environmental changes on lichen community.
	5	Knowledge on how to use the new technologies and methods in lichen ecology.
	6	To acquire the skill of reading, understanding and evaluating articles in related fields with the help of terminology and information learned from the study.
	7	To gain the skill to apply their thesis studies to the knowledge, experience and discipline gained from this course.
	8	To be able to adapt information acquired on life in marine and other aquatic environments to other disciplines and to work and take part in cooperative projects.
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21	Course Content:		
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Week	Theoretical	Practice	
1	Lichen biodiversity, ecological role of lichens, ecological groups and ecological characteristic of lichens.		
2	Environmental modification in lichen thallus: morphology, colour and prinosity, anatomy, chemistry.		
3	Colonization, growth, succession and competition.		
4	Lichens of Boreal coniferous zone: origin of Boreal lichen flora, distributional types of boreal lichens, ecoclimatic differentiation, edafic – topographic differentiation.		
5	Methods used to study lichen communities.		
6	Types of lichen communities: Corticolous and lignicolous communities.		
7	Types of lichen communities: Saxicolous, Terricolous, and Follicolous communities		
8	Repeating courses and midterm exam		
9	Lichens of cold deserts: Some ecological aspects of polar cold desert lichens, distribution patterns of Arctic and Antarctic lichens, evolution of distribution patterns,		
Activites		Number	Duration (hour)
Theoretical response to aridity, factors controlling distribution, lichens in arid ecosystems		14	3.00
Practicals/Labs		0	0.00
Self study/online preparation		14	4.00
Homeworks		0	0.00
Projects epiphytic lichens in forests, distribution patterns of lichens on trees.		0	0.00
Field Studies		3	5.00
Midterm Exams open and forest situations.		1	25.00
Others		0	0.00
Final Exams		1	35.00
Total Work Load			198.00
Total work load/ 30 hr			5.77
23 Assessment			
ECTS Credit of the Course			6.00
	R		
Midterm Exam	1	30.00	
Quiz	0	0.00	
Home work-project	2	20.00	
Final Exam	1	50.00	
Total	4	100.00	
Contribution of Term (Year) Learning Activities to Success Grade		50.00	
Contribution of Final Exam to Success Grade		50.00	
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	5	4	0	0	0	0	0	3	0	5	0	0	0	0	0	0
ÖK2	0	0	0	0	0	0	0	3	0	5	3	0	0	0	0	0
ÖK3	0	4	0	0	0	0	0	0	0	5	0	0	0	0	0	0
ÖK4	0	0	0	4	4	0	0	0	4	5	0	0	0	0	0	0
ÖK5	0	0	0	4	4	0	0	0	4	5	0	0	0	0	0	0
ÖK6	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
ÖK7	0	0	0	0	0	0	0	0	4	5	0	0	0	0	0	0
ÖK8	0	0	0	0	0	0	0	0	4	5	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				