

FORENSIC LIMNOLOGY

1	Course Title:	FORENSIC LIMNOLOGY
2	Course Code:	ADB6120
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:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. NURHAYAT DALKIRAN
15	Course Lecturers:	Dr. Öğr. Üy. Didem Karacaoğlu
16	Contact information of the Course Coordinator:	Bursa Uludağ Üniversitesi Fen-Edebiyat Fakültesi Biyoloji Bölümü Görükle Kampüsü, Nilüfer/BURSA 16059 e-posta: dalkiran@uludag.edu.tr Telefon: 0 224 2941866 Bursa Uludag University Faculty of Arts and Science Department of Biology Gorukle Campus, Nilufer/BURSA e-mail: dalkiran@uludag.edu.tr Phone: 0 224 294 1866
17	Website:	
18	Objective of the Course:	The aim of the course is to learn the methods and techniques to link suspects to scene of crime, by using the fingerprints of microscopic (especially diatoms) and macroscopic organisms living in freshwater ecosystems.
19	Contribution of the Course to Professional Development:	Contribution to academic development
20	Learning Outcomes:	
	1	Obtains information about the basic concepts on Forensic Limnology
	2	Obtains information about freshwater fingerprint organisms
	3	To learn to sampling procedures of microscopic algae and other water organisms in crime scene investigations
	4	To learn how to use diatom test in cases of drowning
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21	Course Content:	
	Course Content:	
Week	Theoretical	Practice

1	Introduction to Forensic Limnology	
2	Sampling procedures of microscopic algae and other water organisms in crime scene investigations	
3	Fingerprinting organisms; diatoms and dinocysts etc.	
4	Diatom fingerprinting and its importance	
5	Body test using by diatoms	
6	Diatom test and its importance in drowning cases	
7	Diatom laboratory procedures (acid cleaning)	
8	Diatom identification and enumeration techniques I	
9	Diatom identification and enumeration techniques II	
10	Estimating postmortem submersion interval by using freshwater organisms	
11	Limitations of diatoms in criminal studies	
12	Freshwater algal toxins in death cases (Cyanotoxins)	
13	Case studies; Horton et al 2006	
14	Case studies II	

22	Textbooks, References and/or Other	Coyle, H. M. (Ed.). (2004). Forensic botany: principles and
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Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	5.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	5.00	70.00
Homeworks	2	25.00	50.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	0	0.00	0.00
Others	0	0.00	0.00

Final Exams	1	25.00	25.00
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TERM LEARNING ACTIVITIES	NUMBE	WEIGHT	25.00	25.00
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Total Work Load				187.00
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Midterm Exam	0	0.00		6.23
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Total work load/ 30 hr	0	0.00		
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ECTS Credit of the Course				6.00
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Home work-project	2	40.00		
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Final Exam	1	60.00		
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Total	3	100.00		
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Contribution of Term (Year) Learning Activities to Success Grade		40.00		
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Contribution of Final Exam to Success Grade		60.00		
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Total		100.00		
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Measurement and Evaluation Techniques Used in the Course	Student attendance and participation, homework, written exam			
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24	ECTS / WORK LOAD TABLE			
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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	4	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
ÖK4	0	0	0	4	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			