

GENERAL MICROBIOLOGY LAB

1	Course Title:	GENERAL MICROBIOLOGY LAB	
2	Course Code:	BYL2053	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	2	
6	Semester:	3	
7	ECTS Credits Allocated:	2.00	
8	Theoretical (hour/week):	0.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	2	
11	Prerequisites:	BYL 2003 General Microbiology course to be taken.	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Doç.Dr. C.CEM ERGÜL	
15	Course Lecturers:	Doç. Dr. C. CEM ERGÜL	
16	Contact information of the Course Coordinator:	Bursa Uludağ Üniversitesi Fen-Edebiyat Fakültesi Biyoloji Bölümü Görükle Kampüsü, Nilüfer/BURSA 16059 e-posta: ergulc@uludag.edu.tr Telefon: 0 224 294 17 81 Bursa Uludag University Faculty of Arts and Science Department of Biology Gorukle Campus, Nilufer/BURSA 16059 e-mail: ergulc@uludag.edu.tr Phone: 0 224 294 17 81	
17	Website:		
18	Objective of the Course:	The use of Equipments and a microscope. Diagnoses and diagnostic samples to reveal for the characteristics of microorganisms. Preparation of nutrient medium. Understanding of the microbiology laboratory operating conditions and rules.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	Can realise some stain methods on microorganisms
		2	May perform on microbiological materials cultivation, determination and the identification.
		3	Can make measure from microorganisms
		4	Can perform monitoring and evaluation of the preparation of the culture medium.
		5	May perform cultivation, determination identification on microbiological materials.
		6	Can be known of sidal and static measures and criteria against to microorganisms
		7	
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21	Course Content:		

	Course Content:			
Week	Theoretical	Practice		
1		Introduction to laboratory materials and equipment		
2		Medium preparation and inoculation, morphologically investigation of bacteria and pure culture obtaining		
3		Izolation of bacteria, Simple staining and Gram staining techniques		
4		Capsule staining, Endospore staining		
5		Morphologically and sitologically investigation of Yeast and mould Fungi		
6		Morphologically investigation of Algal and Protozoan group microorganisms		
7		Midterm and repetation of previously course subjects		
8		Size of microorganisms and measurements		
9		Direct microscopic count; Breed method, Thoma slide, membrane filter, turbidometer		
10		Plate culture technique		
11		Antibogram		
12		Introduction on soil and aquatic biology		
13		Introduction on food microbiology		
14		Microorganisms control;by use Physical and Chemical methods		
Activites		Number	Duration (hour)	Total Work Load (hour)
Theoretical		1	2.00	2.00
Practicals/Labs		14	2.00	28.00
Self study and preperation		4	4.00	16.00
Homeworks		0	0.00	0.00
Projects		0	0.00	0.00
Field Studies		0	0.00	0.00
Midterm exams		1	7.00	7.00
Others		0	0.00	0.00
Final Exam		1	9.00	9.00
Total Work Load				60.00
Total work load/ 30 hr		1	2.00	2.00
Midterm Exam		1	7.00	7.00
ECTS Credit of the Course				2.00
Quiz		2	0.00	0.00
Home work-project		0	0.00	0.00
Final Exam		1	60.00	60.00
Total		4	100.00	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	0	0	4	0	4	4	4	3	4	3	4	0	0	0	0
ÖK2	4	0	1	4	0	4	2	2	3	3	2	4	0	0	0	0
ÖK3	3	2	1	3	0	0	5	0	0	5	3	2	0	0	0	0
ÖK4	3	2	1	3	0	0	5	0	0	5	3	2	0	0	0	0
ÖK5	0	0	1	4	0	4	4	4	1	4	3	3	0	0	0	0
ÖK6	4	0	1	1	0	0	4	0	0	3	2	3	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			