MICROBIOLOGY											
1	Course Title:	MICROE	BIOLOGY								
2	Course Code:	BYL1210)								
3	Type of Course:	Compuls	sory								
4	Level of Course:	First Cyc	le								
5	Year of Study:	1									
6	Semester:	2									
7	ECTS Credits Allocated:	6.00									
8	Theoretical (hour/week):	2.00									
9	Practice (hour/week):	0.00									
10	Laboratory (hour/week):	2									
11	Prerequisites:	None									
12	Language:	Turkish									
13	Mode of Delivery:	Face to f	face								
14	Course Coordinator:	Doç. Dr.	MEHMET SARIMAHMUT								
15	Course Lecturers:	-									
16	Contact information of the Course Coordinator:	Doç. Dr. Mehmet SARIMAHMUT msarimahmut@uludag.edu.tr Tel: +90 224 2941753									
17	Website:										
18	Objective of the Course:	This course aims to understand the biological characteristics, classification, metabolism, and genetic structure of microorganisms, addressing the impact of microbial ecosystems on human health and biotechnology. Additionally, it aims to provide students with experience through microbiological laboratory techniques and applications.									
19	Contribution of the Course to Professional Development:	It provides a solid foundation in microbiology, effective problem analysis skills, and practical laboratory techniques. Through the delivery of both theoretical and practical topics, it enables students to contribute to related engineering challenges and make effective contributions in scientific fields.									
20	Learning Outcomes:										
		1	Understanding the biological characteristics, classification, and metabolism of microorganisms, and evaluating the impact of microbial ecosystems on human health and the environment.								
		2	Gaining the ability to apply microbiological laboratory techniques, including fundamental methods such as sterilization, microorganism inoculation, isolation, and analysis of biochemical activities.								
		3	Analyzing the genetic structure of microorganisms and their role in modern biotechnology, and comprehending the applications of DNA technology and microbial genetics in health, environmental, and industrial fields.								
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21	Course Content:																			
	Course Content:																			
Week	The	eoretical								actice										
1	Fund Impo Che	dame ortan mical	entals ce of l I Four	of Mic Microb Idatior	robio bial Ec ns	logy: Tl cosyste	he ems ar	nd	Int	Introduction to laboratory and the microscope										
2	Obs Micr	ervat osco	ion of py	Micro	orgar	nisms a	Ind		St	erilizat	ion me	thods								
3	Fun Euk	ctiona aryot	al Ana ic Cel	tomy Is	of Pro	karyot	ic and		Mi	Microbiological culture media and their preparation										
4	Micr	obial	Meta	bolism	۱				Сι	Culture methods in microorganisms										
5	Micr	obial	Grow	/th					Ba	acterial	isolatio	on								
6	Con	ontrol of Microbial Growth									anism	countin	g metho	ods						
7	Micr	obial	Gene	etics					In	vestiga	tion of	bioche	mical ad	ctivities	s of mic	roorgani	sms			
8	Biote	otechnology and DNA Technology									nental f anisms	actors :	affecting	g the g	rowth o	f				
9	Clas	Classification of Microorganisms									ogical e	examina	ation of	fungi						
10	Prok	Prokaryotes: Bacteria and Archaea									s and a	antibiog	gram tes	st						
11	Euka Helr	ukaryotes: Fungi, Algae, Protozoa, and lelminths									Simple staining techniques									
12	Viru	ruses, Viroids, and Prions								am sta	aining									
13	3 Microbial Diseases and Epidemiology									Endospore staining										
Activites									Numb	ber	~	Dura	Duration (hour) Total W Load (h							
Theoretical									14 Madison MT. Dandar KG				2.00 28.00							
Practicals/Labs										14		enderr	2.00	2.00 28.00						
Self study and preperation								TH	Harlow: Pearson Education Limited; 2018.					2018.	20.00					
Homeworks								;	5			8.00			40.00					
Project	S S	NING	ACT	VITIES			R						0.00			0.00				
Field S	Field Studies									0 0.00					0.00					
Øid <u>t</u> ern	idzerm exams 0								0.	00			20.00			20.00				
Others										0					0.00					
Final E	Final Exams 1									60100 40.00						40.00				
Total W	Total Work Load									196.00										
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ECTS Credit of the Course										6.00										
Total									10	100.00										
Measur	reme	nt an	d Eva	luatio	n Tec	hnique	s Use	d in th	e W	ritten e	xamina	ations a	ind hom	nework	S					
24	EC	TS /	WO	RKL	OAD	TAB	LE													
25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME																				
		PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1	PQ11	PQ12	PQ1	PQ14	PQ15	PQ16			
											0			3						
OK1		5	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0			

ÖK2	2	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0
ÖK3	5	4	0	0	3	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib ution Level:	Contrib 1 very low ution Level:		2 low		3 Medium			4 High			5 Very High					