

GENERAL MICROBIOLOGY

1	Course Title:	GENERAL MICROBIOLOGY	
2	Course Code:	GESZ103	
3	Type of Course:	Compulsory	
4	Level of Course:	Short Cycle	
5	Year of Study:	1	
6	Semester:	1	
7	ECTS Credits Allocated:	4.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	2.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	-	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Dr. Öğr. Üyesi NUR YÜKSEK	
15	Course Lecturers:	Yard.Doç.Dr. Asuman KARAKAŞ ŞEN	
16	Contact information of the Course Coordinator:	Yard.Doç.Dr. Asuman KARAKAŞ ŞEN U.Ü. Yenişehir İ.O.M.Y.O. akarakas@uludag.edu.tr 773 60 42	
17	Website:		
18	Objective of the Course:	To teach a brief History of Microbiology, Classification of Microorganisms, General Features of Bacteria, Molds, Yeasts and Viruses, Effects of Enviromental Factors on Growth of Bacteria, The Equipments and Items used in the Microbiological Laboratory, Preparation of Culture Media, Microscopic Examination of Microorganisms.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	The student learns the History of Microbiology.
		2	The student learns Classification of Microorganisms.
		3	The student learns General Features of Bacteria, Molds, Yeasts and Viruses.
		4	The student learns Effects of Enviromental Factors on Growth of Bacteria
		5	The student learns the Equipments and Items used in the Microbiological Laboratory.
		6	The student learns preparation of Culture Media.
		7	The student learns the Method of Gram staining.
		8	The student learns Microscopic Examination of Microorganisms.
		9	
		10	
21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	A brief History of Microbiology	Text Books	

2	Classification of Microorganisms	Text Books
3	Morphology of Bacteria	Text Books
4	Morphology of the Colonies	Text Books
5	Bacterial Cell Structure	Text Books
6	Bacterial Cell Structure	Text Books
7	Repeating courses and midterm exam	
8	Chemical composition of Bacteria	Text Books
9	Microbial Nutrition	Text Books
10	The Growth of Bacteria in Broth and on Agar Medium, Measurement of Growth.	Text Books
11	Effects of Enviromental Factors on Growth of Bacteria	Text Books
12	General Features of Molds	Text Books
13	General Features of Yeasts	Text Books
14	General Features of Viruses	Text Books
22	Textbooks, References and/or Other Materials:	<p>1- Temel Mikrobiyoloji, 2. Baskı Prof. Dr. Mustafa Arda. Medisan Yayın Serisi no 46. (2000). Medisan Yayınevi, Ankara</p> <p>2- Genel Mikrobiyoloji, 4. Baskı. Prof. Dr. Mehmet Öner. Ege Üniversitesi Basımevi, Bornova İzmir (2001).</p> <p>3- Genel Mikrobiyoloji Uygulama Teknikleri. Prof. A. Temiz. (2008) Hatiboğlu Yayınevi, Ankara.</p> <p>4- Biology of Microorganisms (7th Edition), Brock, Thomas D.; Michael T. Madigan; John M. Martinko; and Jack Parker (1994) Prentice Hall.</p> <p>5- Fundamentals of Microbiology. 4th Edition. I. Edward Alcamo. Benjamin Cummings (1994)</p> <p>6- Biology of the Prokaryotes. J. Lengeler, G. Drews, H. Schlegel (1999) Blackwell Science.</p> <p>7- Bacillus subtilis and Its Closest Relatives: from Genes to Cells Abraham L. Sonenshein, James A. Hoch, and Richard M. Losick (1999) ASM Press.</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		
24	ECTS / WORK LOAD TABLE	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	14	2.00	28.00
Self study and preperation	13	4.00	52.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	20.00	20.00
Others	0	0.00	0.00
Final Exams	1	22.00	22.00
Total Work Load			150.00
Total work load/ 30 hr			5.00
ECTS Credit of the Course			4.00

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	3	2	5	3	1	1	0	3	2	0	2	2	0	0	0	0
ÖK2	3	2	5	3	1	1	0	3	2	0	2	2	0	0	0	0
ÖK3	3	2	5	3	1	1	0	3	2	0	2	2	0	0	0	0
ÖK4	3	2	5	3	1	1	0	3	2	0	2	2	0	0	0	0
ÖK5	3	2	5	3	1	1	0	3	2	0	2	2	0	0	0	0
ÖK6	3	2	5	3	1	1	0	3	2	0	2	2	0	0	0	0
ÖK7	3	2	5	3	1	1	0	3	2	0	2	2	0	0	0	0
ÖK8	3	2	5	3	1	1	0	3	2	0	2	2	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low		2 low			3 Medium			4 High			5 Very High				