BACTERIAL GENETICS

1	Course Title:	BACTERIAL GENETICS
2	Course Code:	TMK5009
3	Type of Course:	Optional
4	Level of Course:	Second Cycle
5	Year of Study:	1
6	Semester:	1
7	ECTS Credits Allocated:	5.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	2.00
10	Laboratory (hour/week):	0
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. HARUN AĞCA
15	Course Lecturers:	Yok
16	Contact information of the Course Coordinator:	harunagca@uludag.edu.tr
17	Website:	
18	Objective of the Course:	To learn genetic characteristics of organisms, genetic structures of bacteria, gene transfer mechanisms.
19	Contribution of the Course to Professional Development:	To learn bacterial genetics, antibacterial resistance mechanisms and resistance transmission
20	Learning Outcomes:	

	1	Learning the genetic mechanisms
	2	To learn DNA structure and properties
	3	To learn RNA structure and properties
	4	To learn gene transfer mechanisms
	5	To learn the transfer mechanisms of genes that cause antibacterial resistance in bacteria
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21	Course Content:

Course Content:

Week	Theoretical	Practice
1	Genetic structure	
2	DNA structure and properties	
3	DNA structure and reproduction in bacteria	
4	RNA structure and properties	
5	DNA and RNA replication mechanisms	
6	Konjugation	
7	Transformation	

8	Bacterial fages	
9	Gene transfer mechanisms in bacteria	
10	Genetic differences in prokaryotes and eukaryotes	
11	Resistance genes in bacteria 1	
12	Resistance genes in bacteria 2	
13	Resistance genes in bacteria 3	
14	Resistance genes in bacteria 4	

22	Textbooks, References and/or Other Materials:	1) Burton's Microbiology for Health Sciences, 10th Edition, İstanbul Tıp Kitabevi 2017, İstanbul, Ed: Orhan Baylan 2) Manual of Clinical Microbiology, 9th Edition, Atlas Kitapçılık 2009, Ankara, Ed: Ahmet Başustaoğlu
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**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

Activites	Number	Duration (hour)	Total Work Load (hour)
Measurement and Evaluation Techniques Used in the Course	Multiple choice exam	2.00	28.00
Practicals/Labs	14	2.00	28.00
Self study and preperation	14	6.00	84.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	4.00	4.00
Others	0	0.00	0.00
Final Exams	1	6.00	6.00
Total Work Load			150.00
Total work load/ 30 hr			5.00
ECTS Credit of the Course			5.00

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	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	5	5	5	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK3	5	5	5	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK4	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0

ÖK5	5	5	5	0	0	5	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**