DEPARTMENT OF MOLECULAR BIOTECHNOLOGY
COURSE SYLLABUS

Course Details				
Code	**Academic Year**			**Semester**
MBT204	2			4
Title	**T**	**A**	**L**	**ECTS**
Microbiology I	2	1	2	6

Language	German					
Level	**Undergraduate**	**X**	**Graduate**		**Postgraduate**	
Department / Program	Molecular Biotechnology					
Forms of Teaching and Learning	Face-to-Face					
Course Type	**Compulsory**	**X**	**Elective**			
Objectives	Having an understanding of diversity and physiology of microorganisms.					
Content	1. Structure of bacterial cell, cell membrane 2. Biology of fungi 3. Bacterial virology 4. Genetics of bacteria 5. Living environments of bacteria and their adaptations to these 6. Bacterial metabolism 7. Photosynthesis in bacteria 8. Transportsystems 9. Pathogenic microorganisms					
Prerequisites	-					
Coordinator	Prof. Dr. Michael Steinert					
Lecturer(s)	Prof. Dr. Michael Steinert					
Assistant(s)	Research Assistant Ogün Morkoç, Research Assistant Şeyma İş					
Work Placement	-					

Recommended or Required Reading	
Books / Lecture Notes	Allgemeine Mikrobiologie, Georg Fuchs, Georg-Thieme Verlag Lecture notes
Other Sources	

Additional Course Material	
Documents	
Assignments	
Exams	

Course Composition		
Mathematics and Basic Sciences		%

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Engineering		%
Engineering Design		%
Social Sciences		%
Educational Sciences		%
Natural Sciences	100	%
Health Sciences		%
Expert Knowledge	100	%

Assessment

Activity	Count	Percentage (%)
Midterm Exam	1	20
Quiz	0	0
Assignments	0	0
Attendance	0	0
Recitations	0	0
Projects	1	40
Final Exam	1	40
	Total	**100**

ECTS Points and Work Load

Activity	Count	Duration	Work Load (Hours)
Lectures	14	3	42
Self-Study	14	4	56
Assignments	0	0	0
Presentation / Seminar Preparation	0	0	0
Midterm Exam	1	10	10
Recitations	0	0	0
Laboratory	10	2	20
Projects	1	10	10
Final Exam	1	10	10
		Total Work Load	**148**
		ECTS Points (Total Work Load / Hour)	**5**

Learning Outcomes

1	Having an understanding of diversity, physiology and proliferation of microorganisms.
2	Having an understanding of microbial pathogens.
3	Having an understanding of the interaction between different species.

Weekly Content

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1	Structure of bacterial cell, cell membrane
2	Biology of fungi
3	Bacterial virology
4	Genetics of bacteria
5	Living environments of bacteria and their adaptations to these
6	Bacterial metabolism
7	Photosynthesis in bacteria
8	Transportsystems
9	Pathogenic microorganisms

Contribution of Learning Outcomes to Program Objectives (1-5)

	P1	**P2**	**P3**	**P4**	**P5**	**P6**	**P7**
1	5	4	5	5	0	5	0
2	5	4	5	5	0	5	0
3	5	4	5	5	0	5	0

Contribution Level: 1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High

https://obs.tau.edu.tr/oibs/bologna/progLearnOutcomes.aspx?lang=en&curSunit=5707

Compiled by:	Research Assistant Şeyma İş
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