AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Microbiology I								
Course Code	TL106		Couse Level	Short Cycle (Associate's Degree)					
ECTS Credit	2	Workload	54 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	To provide information about the general characteristics and metabolism of microorganism groups.								
Course Content	Information is given about the classification, structure, reproduction and metabolism of microorganisms and antibiotics.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study, Individual Study								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading	
1	Bilgehan H. Temel Mikrobiyoloji ve Bağışıklık Bilimi 8. Baskı. Fakülteler Kitabevi, Bornova, 1996
2	Serter N. Mikrobiyoloji. T.C. Anadolu Üniversitesi Yayınları No:490, Eskişehir, 1991.

Week	Weekly Detailed Course Contents	
1	Theoretical	Classification of organisms, Prokaryotic and Eukaryotic cells
2	Theoretical	Classification and nomenclature of microorganisms
3	Theoretical	Algae and protozoa
4	Theoretical	Fungi
5	Theoretical	Viruses
6	Theoretical	The structure of bacteria, the metabolism
7	Theoretical	The structure of bacteria, the metabolism
8	Intermediate Exam	Midterm exam
9	Theoretical	Microbial metabolism: Energy, respiration and glycolysis
10	Theoretical	Microbial metabolism: TCA, fermentation
11	Theoretical	Microbial metabolism: Enzymes
12	Theoretical	Bacterial Genetics: transformation, conjugation, transduction
13	Theoretical	Bacterial genetics: mutations and mutagens
14	Theoretical	Discovery of antibiotics and their mechanism of action
15	Theoretical	Antibiotic resistance
16	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Individual Work	5	0	1	5
Midterm Examination	1	2	1	3
Final Examination	1	2	2	4
			Total Workload (Hours)	54
			[Total Workload (Hours) / 25*] = **ECTS**	2
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To understand the taxonomy of organisms
2	To learn the groups of microorganisms

3	Understanding the metabolic and genetic functions of microorganisms
4	Be aware of the importance of using antibiotics
5	To understand between procaryotic cell and eucaryotic cell

Programme Outcomes *(Medical Laboratory Techniques)*	
1	To be able to have sufficient back ground in medical laboratory techniques and medical laboratory branches (biochemistry, microbiology,parasitology,sitogenetiketc.);the ability to use theoretical and practical knowledge in these fields.
2	To be able to have the basic theoretical and practical knowledgeand other resources have been supported applications and tools based on secondary-level qualifications gained in the field of Medical Laboratory Techniques Program to-date text boks containing formations
3	To be able to have basic knowledge about structure and function of systems in human, to analyse these data on tissue, cell and diseases.
4	To be able to analyse the medical samples necessary for physicians by using tools, equipment and techniques at the diagnostic and the rapeutic laboratories of health agencies and evaluate the data.
5	To be able to use the medical laboratoy tools and equipments according to rules and technics, and make controls and maintenance of them
6	To be able to perform basic tests of related different medical laboratories, prepare solutions.
7	To be able to perform proper sample collection and transport procedures for the medical laboratory tests from the patient.
8	To be able to perform preanalytical sample preparation procedure, prepare inspection preparations, perform disinfection and sterilization
9	To be able to interpret and evaluate data, define and analyze problems, develop solutions based on research and proofs by using acquired basic knowledge and skills with in the field.
10	To be able to have knowledge about work organization and carry out related practice in medical laboratories
11	To be able to carry out laboratory safety protocols, take individual safety precaution and create safe laboratory environment.
12	To be able to gain the ability to apply by viewing and evaluating the processes related to his/her fields in public and private sector.
13	To be able to gain the awareness of the necessity of life long learning, ability to follow developments in science and technology and self-renewal.
14	To be able to help laboratory experts and medical scientists for their researches
15	To be able to be aware of individual and public health, environmental protection and job security issues, under standing the basic level of the relationship.
16	To be able to grasp principles of Atatürk and there volutions, to ensurenational, ethical, spiritual and cultural values, to adopt to universal and contemporary developments
17	To be able to communicate efficiently for medical service and speak Turkish efficiently.
18	To be able to communicate in English at basic level, utilize foreign language on occupational practice
19	To have the appropriate knowledge of medical sciences at the level of interest, to use specific medical terms and terminology of field

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5
P1	5	5	5	5	5
P2	4	4	5	5	5
P9	5	5	5	5	
P19	5	5	5	5	5