

Course Title	Code	Semester	Theoretical (hours/week)	Practice (hours/week)	Laboratory (hours/week)	ECTS
Basic Laboratory Principles and Methods	MİK 519	1./2. Semester	2	2	0	5
Prerequisites	None					
Course Language	Turkish					
Course Type	Elective					
Teaching Methods	Lecture, question- answer, demonstration, practice-exercise					
Instructor(s)						
Course Objective	The aim of this course is to gain knowledge and skills about basic laboratory principles and methods in the field of medical microbiology.					
Course Learning Outcomes	1- Learns the functioning of the laboratory. 2- Recognizes and uses the devices and materials used in the laboratory. 3- Learns and applies the basic laboratory methods applied in microbiology.					
References	1- Temel /Klinik Tıbbi Laboratuvar. Editör: Hatice Paşaoğlu, 2018. 2- Klinik Mikrobiyoloji Cep Rehberi. Ahmet Başustaoğlu, Dürdal Us,2018.					

WEEKLY COURSE TOPICS

Weeks	DISCUSSION TOPICS TO BE PROCESSED
1.	Microbiology Laboratory Design , Working Principles and Safety
2.	Basic Laboratory Equipments
3.	Types and Use of Microscopes
4.	Collection and Processing of Samples
5.	Methods for Detection and Identification of Microorganisms
6.	Methods for Detection and Identification of Microorganisms
7.	Methods for Detection and Identification of Microorganisms
8.	Midterm exam
9.	Data Analysis and Evaluation
10.	Storage of Microorganisms
11.	Quality in Clinical Microbiology Laboratory
12.	Laboratory Practice
13.	Laboratory Practice
14.	Laboratory Practice
15.	Final Exam

ECTS / WORK LOAD TABLE

Activities	Number	Duration	Total Work Load
Course	14	2	28
Laboratory			
Practice	14	2	28
Field Study			
Outclass course work hours (Self working / Teamwork / Preliminary work)	14	2	28
Presentations (Video preparation / Poster preparation / Oral presentation / Focus group discussion / Applying questionnaire/ Observation and report writing)	4	6	24
Seminars			
Project			
Case study			
Role playing, dramatization			
Preparing and criticizing article			
Semester midterm exams	1	7	7
Semester final exams	1	10	10
Total Work Load (hour) / 25(s)	125/25		
ECTS	5		

EVALUATION SYSTEM

Midterm Studies	Number	Contribution
Midterm exam	1	%30
Quiz		
Laboratory		
Practice		
Field Study		
Specific practical training (If exists)		
Homework assignment		
Presentation and seminar	4	%20
Projects		
Other evaluation methods		
Total of Midterm Studies		%50
Final Studies		
Final	1	%50
Homework assignment		
Practice		
Laboratory		
Total of Final Studies		%50
Contribution of midterm studies to course grade		%50
Contribution of final studies to course grade		%50
Total Grade		100

RELATIONSHIPS BETWEEN COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Program Qualifications		Learning Outcomes		
		LO1	LO2	LO3
1.	Gains scientific knowledge and skills at the level of expertise in the field of medical microbiology.	5	5	5
2.	Uses the research resources adequately to reach scientific knowledge.	4	4	4
3.	Reaches new information in the field of medical microbiology and synthesizes the information obtained from different sources and evaluates it from a scientific point of view.	4	4	4
4.	Gains awareness about the ethics of scientific work and fulfills ethical responsibilities.	4	4	4
5.	Learns and applies the basic principles of research methods.	4	4	5
6.	Describes the morphological and physiological characteristics of microorganisms.	2	2	3
7.	Works in the laboratory in accordance with biosafety rules.	5	4	5
8.	Have knowledge about the devices and tools that are specific to the field and use them.	4	5	4
9.	Learns and applies laboratory techniques used in the field of medical microbiology.	5	4	5
10.	Knows and applies the basic methods for microbiological examination.	5	4	5
11.	Conducts studies related to the field individually or in a team. Performs the tasks given in scientific studies.	5	5	5
12.	Plans and conducts scientific research by using the knowledge learned in the field of medical microbiology, analyzes and evaluates the results.	5	5	5
13.	Gains the ability to present the information obtained or information related to his / her studies orally and visually.	4	4	4
14.	Follows scientific developments and current studies.	4	4	4
15.	Gains the ability of lifelong learning.	5	5	5

Contribution to the level of proficiency: 1: Low 2: Low/Moderate 3: Moderate 4: High 5: Excellent