

TOROS ÜNİVERSİTESİ

Vocational School
Medical Laboratory Techniques

Course Information

MEDICAL MICROBIOLOGY I					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
TLT205	Fall	2	2	3	4

Prerequisites and co-requisites	No
Language of instruction	Turkish
Type	Required
Level of Course	Associate
Lecturer	Lec. Müzeyyen AKSU
Mode of Delivery	Face to Face
Suggested Subject	No
Professional practise (internship)	None
Objectives of the Course	To give knowledge and skills about general information in medical microbiology
Contents of the Course	Microbial world, Classification of microorganisms and general properties, Ultrastructure of bacterial cell. Physiology of bacterial growth, Genetics of bacteria, Microbe-host interactions, Infection and transmission routes, Normal microbial flora, Principles of sterilization and disinfection, Staphylococci, Streptococci, Pneumococci, Neisseriae, Gram positive aerobic and anaerobic bacteria, Mycobacteria, Enteric bacteria, Small Gram negative bacteria Haemophilus, Mycoplasma, Rickettsia, Chlamydia, Spiral microorganisms, Antibiotic action and resistance mechanisms.

Learning Outcomes of Course

#	Learning Outcomes
1	Learn general properties of microorganisms
2	Get basic information about microorganism-host relationships
3	Learn about microorganism production
4	Learn sterilization and disinfection
5	Get basic and advanced information about the bacteria that are medically important
6	Learn about the effect and resistance mechanisms of antibiotics

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Microbial world, Classification of microorganisms and general properties, Ultrastructure of bacterial cell	Lecture, Discussion
2	Physiology of bacterial growth, Genetics of bacteria	Lecture, Discussion
3	Infection and transmission routes, Microbe-host interactions ,Normal microbial flora,	Lecture, Discussion
4	Principles of sterilization	Lecture, Discussion
5	Principles of disinfection	Lecture, Discussion
6	Staphylococci, Streptococci	Lecture, Discussion
7	Neisseriae, Moraxella	Lecture, Discussion

8	Midterm	
9	Mycobacteria and mycobacteria laboratory	Lecture, Discussion
10	Gram negative bacteria:Enteric bacteria	Lecture, Discussion
11	Gram positive aerobic and anaerobic spore forming bacilli	Lecture, Discussion
12	Mycoplasma, Rickettsia, Chlamydia	Lecture, Discussion
13	Spirochetes	Lecture, Discussion
14	Antibiotic action and resistance mechanisms	Lecture, Discussion
15	Final Exam	
16		

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
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Method of Assessment

#	Weight	Work Type	Work Title
1	40%	Mid-Term Exam	Mid-Term Exam
2	60%	Final Exam	Final Exam

Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Learn general properties of microorganisms	1,2	1,2
2	Get basic information about microorganism-host relationships	2	1,2
3	Learn about microorganism production	1,13	1,2
4	Learn sterilization and disinfection	4,7	1,2
5	Get basic and advanced information about the bacteria that are medically important	2,13	1,2
6	Learn about the effect and resistance mechanisms of antibiotics	2,13	1,2

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	4	56
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	4	56
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	0	0	0
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	0	0	0
8	Midterm Exam	1	3	3
9	Quiz	1	1	1
10	Homework	0	0	0
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	0	0	0

14	Final Exercise	0	0	0
15	Preparation for Final Exam	1	3	3
16	Final Exam	1	1	1
				120