

## Course Plan

Semester: 1	Academic Year: 2024
Level:	Major: bacteriology
Course Title: Medical Bacteriology Dentistry	Department: Bacteriology and Virology, School of Medicine
Course Code: 127413	University Professor or Faculty member:
Class NO: Tadbir International Education Center, Medical University of Isfahan, Hezar-Jerib Ave., Isfahan, Iran <a href="mailto:iedu.info@mui.ac.ir">iedu.info@mui.ac.ir</a> +98 31 37927657-9	Credit Hours: 51
Prerequisite: General Chemistry Plus biology	Credit Units: 3
Availability of Professor:	Tel: +983137929039
Office Address: Department of Bacteriology and Virology	E-mail: <a href="mailto:h_fazeli@med.mui.ac.ir">h_fazeli@med.mui.ac.ir</a>
Name of Student Representative and Cellphone Number. Professor Hossein Fazeli	Number of Students:

**The General Purpose of the Lesson:**

Designed to provide students with a clear entry to mid-level understanding of the clinical and diagnostic issues in bacteriology, the course should be used as an introduction to more advanced study in infectious diseases and clinical microbiology.

**Learning Outcomes (Objectives):**

**Basic Bacteriology** includes;

Principles of bacteriology, including structure, function, metabolism, genetics, classification of bacteria and typing methods, normal flora, interaction of bacteria with each other, hosts, and the environment, pathogenesis of bacteria and host defense, disinfection, sterilization, and mechanisms of action of disinfectants, mechanisms of action of antibiotics and bacterial resistance to antibiotics.

**Clinical Bacteriology:**

The primary aim of the clinical bacteriology is to provide the medical students with characteristics, pathogenesis, and epidemiology and laboratory diagnosis of pathogenic bacteria to help students to learn how to deal with the diagnosis of infectious diseases.

At each lecture the taxonomy, structure, epidemiology, virulence factors, clinical presentations of infection, diagnosis and detection, treatment and prevention are discussed for each.

**Main References (Text Books): Medical Microbiology 8th Edition**

By Patrick R. Murray PhD (Author), Ken S. Rosenthal PhD (Author), Michael A. Pfaller MD(Author). Latest version.

**References for More Reading:**

**Student's Responsibilities: study hard and prepare for examination**

**Attendance Rules:**

**The students should be present on all online lectures.**

**Department's Attitudes:**

**Mid Exam Date:**

**Final Exam Date:**

<b>NO Of Session</b>	<b>Main Topic</b>	<b>Teacher's Name</b>	<b>Time</b>	<b>Date</b>
<b>1</b>	Microbial life	Dr H. Shojaei	1 hour 8 – 9 AM	03/6/20
<b>2</b>	Bacterial Structure 1	Dr D. Mansoori	1 hour 9 – 10 AM	03/6/20
<b>3</b>	Bacterial Structure 2	Dr D. Mansoori	1 hour 8 – 9 AM	03/6/21
<b>4</b>	Bacterial Structure 3	Dr D. Mansoori	1 hour 8 – 9 AM	03/6/27
<b>5</b>	Classification of Bacteria	Dr V. Karbasizadeh	1 hour 9 – 10 AM	03/6/27
<b>6</b>	Physiology and Metabolism of bacteria	Dr B. Nasre Esfahani	1 hour 8 – 9 AM	03/6/28
<b>7</b>	Physiology and Metabolism of bacteria	Dr B. Nasre Esfahani	1 hour 8 – 9 AM	03/7/3
<b>8</b>	Bacterial growth	Dr J.Faghri	1 hour 9 – 10 AM	03/7/3
<b>9</b>	Pathogenesis	Dr A. Mirzaei	1 hour 8 – 9 AM	03/7/4
<b>10</b>	Disinfection and Sterilization	Dr H. Fazeli	1 hour 8 – 9 AM	03/7/10
<b>11</b>	Disinfection and Sterilization	Dr H. Fazeli	1 hour 9 – 10 AM	03/7/10
<b>12</b>	Bacterial Genetics	Dr A. Mirzaei	1 hour 8 – 9 AM	03/7/11
<b>13</b>	Bacterial Genetics	Dr A. Mirzaei	1 hour 8 – 9 AM	03/7/17
<b>14</b>	Antibiotics; Mechanisms of Action and resistance	Dr H. Fazeli	1 hour 9 – 10 AM	03/7/17
<b>15</b>	Antibiotics; Mechanisms of Action and resistance	Dr H. Fazeli	1 hour 8 – 9 AM	03/7/18
<b>16</b>	Normal flora	Dr V. Karbasizadeh	1 hour 8 – 9 AM	03/7/24
<b>17</b>	Gram positive cocci,	Dr D. Mansoori	1 hour 9 – 10 AM	03/7/24

	Staphylococci			
18	Gram positive cocci, Staphylococci	Dr D. Mansoori	1 hour 8 – 9 AM	03/7/25
19	Streptococci; Enterococcus	Dr B. Nasre Esfahani	1 hour 8 – 9 AM	03/8/1
20	Streptococci; Enterococcus	Dr B. Nasre Esfahani	1 hour 9 – 10 AM	03/8/1
21	Neisseria and Branhamella	Dr D. Mansoori	1 hour 8 – 9 AM	03/8/2
22	Gram-positive Bacilli; Listeria	Dr H. Shojaei	1 hour 8 – 9 AM	03/8/8
23	Gram-positive Bacilli, Bacillus anthracis	Dr B. Nasre Esfahani	1 hour 9 – 10 AM	03/8/8
24	Gram-positive Bacilli, Corynebacterium	Dr D. Mansoori	1 hour 8 – 9 AM	03/8/9
25	Gram-positive Bacilli, Clostridia	Dr V. Karbasizadeh	1 hour 8 – 9 AM	03/8/15
26	Gram-positive Bacilli, Clostridia	Dr V. Karbasizadeh	1 hour 9 – 10 AM	03/8/15
27	Enterobacteriaceae and E. coli	Dr H. Fazeli	1 hour 8 – 9 AM	03/8/16
28	Enterobacteriaceae and E. coli	Dr H. Fazeli	1 hour 8 – 9 AM	03/8/22
29	Shigella and Salmonella	Dr H. Shojaei	1 hour 9 – 10 AM	03/8/22
30	Yersinia and Pasteurella	Dr J.Faghri	1 hour 8 – 9 AM	03/8/23
31	Vibrio	Dr H. Shojaei	1 hour 8 – 9 AM	03/8/29
32	Mycobacterium tuberculosis	Dr B. Nasre Esfahani	1 hour 9 – 10 AM	03/8/29
33	Mycobacterium tuberculosis	Dr B. Nasre Esfahani	1 hour 8 – 9 AM	03/8/30
34	Atypical mycobacteria and leprosy	Dr. H. Shojaei	1 hour 8 – 9 AM	03/9/6

35	Brucella	Dr H. Shojaei	1 hour 9 – 10 AM	03/9/6
36	Hemophilus and other fastidious Gram-negatives	Dr J.Faghri	1 hour 8 – 9 AM	03/9/7
37	Pseudomonas and the non-fermenters	Dr H. Fazeli	1 hour 8 – 9 AM	03/9/13
38	Legionella and Miscellaneous organisms	Dr J.Faghri	1 hour 9 – 10 AM	03/9/13
39	Campylobacter	Dr A. Mirzaei	1 hour 8 – 9 AM	03/9/14
40	Helicobacter	Dr A. Mirzaei	1 hour 8 – 9 AM	03/9/20
41	Treponema, Lyme disease and syphilis	Dr V. Karbasizadeh	1 hour 9 – 10 AM	03/9/20
42	Borrelia	Dr V. Karbasizadeh	1 hour 8 – 9 AM	03/9/21
43	Chlamydia	Dr H. Fazeli	1 hour 8 – 9 AM	03/9/27
44	Bordetella, and Francisella	Dr J.Faghri	1 hour 9 – 10 AM	03/9/27
45	Actinomyces	Dr J.Faghri	1 hour 8 – 9 AM	03/10/28
46	Actinomyces	Dr J.Faghri	1 hour 8 – 9 AM	03/10/4
47	Nocardia	Dr J.Faghri	1 hour 9 – 10 AM	03/10/4
48	Bacteroides and Gram-negative Anaerobes	Dr V. Karbasizadeh	1 hour 8 – 9 AM	03/10/5
49	Bacteroides and Gram-negative Anaerobes	Dr V. Karbasizadeh	1 hour 8 – 9 AM	03/10/11
50	Rickettsia's	Dr A. Mirzaei	1 hour 9 – 10 AM	03/10/11
51	Mycoplasma	Dr H. Fazeli	1 hour 8 – 9 AM	03/10/12

**Total hours of the class: 51**