



In the Name of God
School of Medicine
Department of Microbiology
Course Plan

- **Course Title:** Diagnostic Clinical Bacteriology 1
- **Semester:** First Half of the Academic Year 2025–2026
- **Field and Level:** Master of Medical Microbiology
- **Audience:** Second-Semester Master's Students in Medical Microbiology
- **Class Schedule:** Saturdays, 8:00 AM – 10:00 AM
- **Location:** Microbiology Laboratory (School of Medicine)
- **Credits:** 1
- **Prerequisites:** None
- **Instructor:** Dr. Mansoor Khaledi
- **Contact Phone and Days:** 09136766429 – Saturday to Wednesday
- **Office Hours for Student Inquiries:** Every day during office hours
- **Instructor's Office:** Microbiology Laboratory (School of Medicine) – First Floor, Instructor's Office
- **Email:** mansoor.khaledi@yahoo.com

General Objective:

To familiarize students with the principles of working in a microbiology laboratory and the identification of medically important bacteria.

Specific Objectives:

By the end of this course, students will be able to

1. Understand safety and protection principles in the laboratory.
2. Prepare reagents and stains and perform quality control.
3. Become familiar with equipment used in the microbiology laboratory.
4. Learn the principles of using a light microscope.
5. Understand clinical sample collection and transport methods.
6. Prepare microbiological culture media.
7. Learn about microscopes and bacterial staining techniques.

8. Understand bacterial culturing methods.
9. Culture and identify target bacteria.
10. Learn antibiotic susceptibility testing (antibiogram) and interpretation.
11. Understand methods for identifying various bacterial groups in the bacteriology lab.
12. Learn to culture clinical samples.

Required Textbooks & References

1. *Laboratory Bacteriology* by Dr. Zamanzad, Karimi – Zagros Publications
2. *Jawetz, Melnick & Adelberg's Medical Microbiology* (Latest Edition)
3. *Medical Microbiology* by Murray (Latest Edition)
4. *Bailey & Scott's Diagnostic Microbiology* (Latest Edition)
5. *Koneman's Color Atlas and Textbook of Diagnostic Microbiology* (Latest Edition)

Grading Policy

A) During the Semester:

- Practical activities and tasks per session: 4 points
- Lab report submission per session: 2 points
- Active class participation, discipline, punctuality, and responsiveness: 2 points

B) End of Semester:

- Final exam (practical + multiple-choice/descriptive questions covering all topics)

Attendance & Punctuality Policy

- Attendance will be recorded in each session.
- 0.25 points will be deducted from the final grade for each unexcused absence.
- Excessive unexcused absences will be reported to the Faculty Administration, and decisions will be made according to educational regulations.

Course Schedule – Practical Bacteriology (2025–2026)

#	Date	Topic	Instructor	Student Preparation
1	12/07/1404	Introduction to Lab Equipment, Safety, and Sterilization Methods	Dr. Khaledi	Wear lab coat

2	19/07/1404	Microscopes, Sampling, Smear Preparation, and Staining Techniques	Dr. Khaledi	Review handout, wear lab coat
3	26/07/1404	Culture Media and Culturing Methods	Dr. Khaledi	Review handout, wear lab coat
4	03/08/1404	Principles of Clinical Sample Collection and Transport	Dr. Khaledi	Review handout, wear lab coat
5	10/08/1404	Quality Control in the Laboratory	Dr. Khaledi	Review handout, wear lab coat
6	17/08/1404	Antibiogram	Dr. Khaledi	Review handout, wear lab coat
7	24/08/1404	Culture and Diagnostic Methods for Gram-Positive Cocci (Staphylococci)	Dr. Khaledi	Review handout, wear lab coat
8	01/09/1404	Culture and Diagnostic Methods for Gram-Positive Cocci (Streptococci & Enterococci)	Dr. Khaledi	Review handout, wear lab coat
9	08/09/1404	Neisseria spp.	Dr. Khaledi	Review handout, wear lab coat
10	15/09/1404	Anaerobic Bacteria	Dr. Khaledi	Review handout, wear lab coat
11	22/09/1404	Corynebacteria	Dr. Khaledi	Review handout, wear lab coat
12	29/09/1404	Non-Fermenting Gram-Negative Bacteria	Dr. Khaledi	Review handout, wear lab coat

Examination Dates

- **Midterm Exam:** As per the department schedule, in coordination with the Faculty of Medicine.
- **Final Exam:** As per the department schedule, in coordination with the Faculty of Medicine.

Additional Important Notes for Students

- ✓ Actively participate in class discussions.
- ✓ Maintain discipline and punctuality.
- ✓ Submit research assignments to earn bonus points for the final exam.
- ✓ Adhere to laboratory safety and operational guidelines.

Teaching Method

- Lecture and Practical Work

Instructor's Name and Signature: Dr. Mansoor Khaledi

Department Head's Name and Signature: Dr. Behnam Zamanzad

EDO Name and Signature: _____

Submission Date: _____

Is this course plan being offered for the first time?

☒ Yes ☐ No

Approved by Department Head & Signed: Dr. Behnam Zamanzad