



Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Allied Medical Sciences Department

LM741 Advanced Diagnostic Microbiology - JNQF Level: 9

First Semester 2024-2025

Course Catalog

3 Credit Hours. This course introduces the student to advanced comprehensive diagnostic techniques for microorganisms influencing human health and diseases. It consists of lectures for selection, collection, processing of specimens, isolation of disease cause, and identification from specific diseases, including the respiratory, gastrointestinal, and urogenital systems, blood and cerebrospinal fluids, wounds, abscesses, skin, and soft tissues. In addition, the course will include oral presentations to improve students' skills. All presented topics will undergo in-class discussions.

Teaching Method: On Campus

Text Book

Title	Bailey & Scott's Diagnostic Microbiology
Author(s)	Patricia M. Tille
Edition	15th Edition
Short Name	Ref. 1
Other Information	Elsevier, USA, 2022

Instructor

Name	Prof. Mamdoh Harahsha
Office Location	M5L4
Office Hours	Sun : 12:00 - 14:00 Mon : 11:00 - 13:00 Tue : 11:00 - 13:00 Wed : 11:00 - 13:00
Email	meqdam@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Tue : 13:30 - 16:30

Room: N4201

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Microbe-Human Interactions: Health & Disease	
Week 2	Diagnosing Infections	
Week 3	Specimen Management	
Week 4	Bloodstream Infections	
Week 5	Lower Respiratory Tract Infections	
Week 6	Upper Respiratory Tract, Oral Cavity, and Neck Infections	
Week 7	Central Nervous Systems Infections	
Week 8	Eyes, Ears, and Sinuses Infections	
Week 9	Urinary Tract Infections	
Week 10	Genital Tract Infections	
Week 11	Gastrointestinal Tract Infections	
Week 12	Skin, Soft Tissue, and Wound Infections	
Week 13	Normally, Sterile Body Fluids, Bone and Bone Marrow, and Solid Tissues	
Weeks 14, 15	Presentations	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
1. Present the latest developments in the field of medical diagnostic microbiology [1MSLO5] [1L9K1]	20%	Midterm
2. Critique the rationale, methodology and results of up-to-date research articles in the field of diagnostic microbiology. [1MSLO6] [1L9K2]	20%	Midterm
3. Weigh the impact of the latest research results on clinical applications in the field of diagnostic microbiology. [1MSLO1] [1L9K2]	20%	Midterm
4. Review the latest evidence in literature related to special topics in diagnostic microbiology. [1MSLO6] [1L9C5]	20%	Midterm
5. Design studies to address gaps in knowledge in the field of diagnostic microbiology. [1MSLO5] [1L9C4]	20%	Midterm

Relationship to Program Student Outcomes (Out of 100%)											
SLO1	SLO2	SLO3	SLO4	SLO5	SLO6	MSLO1	MSLO2	MSLO3	MSLO4	MSLO5	MSLO6
						20				40	40

Relationship to NQF Outcomes (Out of 100%)			
L9K1	L9K2	L9C4	L9C5
20	40	20	20

Evaluation	
Assessment Tool	Weight
Midterm	20%
Seminars	30%
Final	50%

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