

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

LM221 Medical Microbiology - JNQF Level: 7

Second Semester 2023-2024

Course Catalog

2 Credit Hours. This is an introductory course in medical microbiology. It explores and covers basic principles of bacteriology, virology, mycology, parasitology and immunology. It discusses different types of microorganisms as infectious agents and emphasis on their structures and products that allow them to cause disease. It examines the host/pathogen relationship from the standpoint of the pathogenic organism, the human host, and the environment. Also it studies the Epidemiology and the Nosocomial infections with focusing in pandemics with the importance of sterilization and disinfection. Preparing the student for the Advanced Clinical Microbiology courses

Teaching Method: On Campus

| Text Book | | | | | | | |
|----------------------|---|--|--|--|--|--|--|
| Title | Burton's Microbiology For The Health Sciences | | | | | | |
| Author(s) | PaulG.Engelkirk & Janet Duben- Engelkirk | | | | | | |
| Edition | 11th Edition | | | | | | |
| Short Name | Ref.1 | | | | | | |
| Other Information | publication date 2018, ISBN:9781284209952 | | | | | | |

| Instructor | | | | |
|-----------------|--|--|--|--|
| Name | Mrs. Yasemin Shboul | | | |
| Office Location | M1-L-2 | | | |
| Office Hours | Sun: 10:30 - 12:30 Mon: 11:00 - 11:30 Mon: 12:30 - 13:00 Tue: 10:30 - 12:00 Wed: 08:30 - 10:00 | | | |
| Email | yashboul@just.edu.jo | | | |

Class Schedule & Room

Section 1:

Lecture Time: Mon, Wed: 13:00 - 14:00

Room: N4205

| Tentative List of Topics Covered | | | | | | | |
|----------------------------------|--|-------------------|--|--|--|--|--|
| Weeks | Topic Re | | | | | | |
| Week 1 | Introduction to microbiology | | | | | | |
| Week 2 | Cell Structure and taxonomy | From Ref.1 | | | | | |
| Week 3 | Diversity of microorganisms part one bacteria | | | | | | |
| Week 4 | Diversity of microorganisms part two viruses and prions | | | | | | |
| Week 5 | Diversity of microorganisms, eucaryotic microbes Fungi and lichens | | | | | | |
| Week 6 | Diversity of microorganisms, eucaryotic microbes algae , protozoa | | | | | | |
| Week 7 | Microbial Physiology and Genetics | | | | | | |
| Week 8 | Microbial Ecology | | | | | | |
| Week 9 | Immunology and Host Defense System | | | | | | |
| Week 10 | Epidemiology and Public Health | | | | | | |
| Week 11 | Healthcare Epidemiology: Nosocomial Infections and Infection Control | | | | | | |
| Week 12 | Controlling Microbial growth Part one | | | | | | |
| Week 13 | Controlling Microbial growth and antibiotics Part two | | | | | | |
| Week 14 | Major Bacterial and Viral Diseases of Humans | | | | | | |
| Week 15 | Major Fungal Diseases of Humans | | | | | | |
| Week 16 | Major Parasitic Diseases of Humans | | | | | | |

| Mapping of Course Outcomes to Program Outcomes and NQF Outcomes | Course Outcome Weight (Out of 100%) | Assessment method |
|---|--|-------------------|
| Classify different types of microorganisms, their structures and taxonomy [10SLO1, 10SLO4] [20L7K1] | 20% | |

| Relationship to Program Student Outcomes (Out of 100%) | | | | | | | | | | | |
|--|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| SLO1 | SLO2 | SLO3 | SLO4 | SLO5 | SLO6 | MSLO1 | MSLO2 | MSLO3 | MSLO4 | MSLO5 | MSLO6 |
| 10 | | | 10 | | | | | | | | |

| Relationship to NQF Outcomes (Out of 100%) | | | | | |
|--|--|--|--|--|--|
| L7K1 | | | | | |
| 20 | | | | | |

| Evaluation | | | | | |
|-----------------|--------|--|--|--|--|
| Assessment Tool | Weight | | | | |
| First Exam | 30% | | | | |
| Second Exam | 30% | | | | |
| Final Exam | 40% | | | | |

Date Printed: 2024-03-10