



1	Course title	Microbiology for Nursing		
2	Course number	5701108		
•	Credit hours	3 hours		
3	<b>Contact hours (theory, practical)</b>	3 hours per week		
4	Prerequisites/corequisites	5501101		
5	Program title	Bachelor in Nursing		
6	Program code	570		
7	Awarding institution	The University of Jordan-Aqaba		
8	School	School of Nursing		
9	Department	Nursing		
10	Level of course	First year		
11	Year of study and semester (s)	Second Semester 2020/2021		
12	Final Qualification	B.Sc.		
13	Other department (s) involved in teaching the course	None		
14	Language of Instruction	English		
15	Teaching methodology	□Blended ⊠Online		
16	Flectronic platform(s)	⊠Moodle ⊠Microsoft Teams □Skype ⊠Zoom		
	Electronic platform(s)	□Others		
17	Date of production/revision	14/02/2021		

### **18 Course Coordinator:**

## Dr. Zeinab H. Arabeyyat

Office number: 342 Office hours: 13:00 – 14:00 pm (Sun, Mon, and Tue). Students can contact me via E-Learning, and Microsoft Teams Phone number: 032090450 ext. 36051 Email address: <u>z.arabeyyat@ju.edu.jo</u>

## **19 Other instructors:**

N/A

### 20 Course Description:

As stated in the approved study plan.

The course includes general introduction about microorganisms of different types of viruses, bacteria, fungi and parasites, and their prevalence in humans and nature, and the cellular and humeral immune responses are considered in relation to infectious disease. The course provides knowledge on the most important types of human pathogens, clinical signs and symptoms, laboratory diagnosis and prevention and treatment. Hospital acquired infection and procedures to prevent infection in hospitals and methods of sterilization and disinfection are included.

#### 21 Course aims and outcomes:

A- Aims:

An introductory course will provide students with an understanding of the key microbiological concepts relevant to nursing and client care. Progresses from the discussion of nosocomial infections to various aspects of microbiological infections to various aspects of microbiology. Includes the basic characteristics of microorganisms as well as the relationship between microbes, humans and their environment. Emphasizes the application of these concepts in the identification, prevention and treatment of infectious diseases. Also includes selected topics on microbial agents with emerging significance, to keep you aware of the trends in microbiology.

B- Intended Learning Outcomes (ILOs):

Upon successful completion of this course, students will be able to:

- Become aware of the presence of microorganisms in the human body, workplace and home environments.
- Summarize the difference between prokaryotes and eukaryotes as well as the prokaryotes and eukaryotes cell structure.
- Summarize growth nutrition of microorganism.
- Apply basic microbiological principles to effective infection control.
- Introduction to Virology, Parasitology, and Mycology.
- Summarize the basic concepts of nosocomial infections and their prevention.
- Summarize the need for the practice of proper specimen collection and handling.
- Describe the basic characteristics of the major microbial classes (e.g., bacteria, viruses, protozoa and pathogenic fungi).
- Define epidemiology and its significance in the control of communicable diseases.
- Discuss the concept of communicability of microorganisms on the basis of the transmission modes.

## 22. Topic Outline and Schedule:

Week	Lecture	Торіс	Teaching Methods*/platform	Evaluation Methods**	References
1	1.1 1.2	What Is Microbiology and Why Does It Matter?	Synchronous lecturing/meeting	Oral questions	Textbooks
2	2.1 2.2	Tools of the Laboratory: Methods of Studying Microorganisms	Synchronous lecturing/meeting	Oral questions	Textbooks
3	3.1 3.2	Procedures for Identifying Pathogens and Diagnosing Infections	Synchronous lecturing/meeting	Quiz	Textbooks
4	4.1 4.2	Requirements for Infection	Synchronous lecturing/meeting	Oral questions	Textbooks
5	5.1 5.2	Microbe-Human Interactions: Infection and Disease	Synchronous lecturing/meeting	Oral questions	Textbooks
6	6.1 6.2	The Gram-Positive and Gram-Negative Cocci of Medical Importance	Synchronous lecturing/meeting	Quiz	Textbooks
7	7.1 7.2	Miscellaneous Bacterial Agents of Disease	Synchronous lecturing/meeting	Midterm examination	Textbooks
8	8.1 8.2	The Fungi of Medical Importance	Synchronous lecturing/meeting	Oral questions	Textbooks
9	9.1 9.2	The Parasites of Medical Importance	Synchronous lecturing/meeting	Oral questions	Textbooks
10	10.1 10.2	Viruses That Infect Humans	Synchronous lecturing/meeting	Homework	Textbooks
11	11.1 11.2	Physical and Chemical Agents for Microbial Control	Synchronous lecturing/meeting	Oral questions	Textbooks
12	12.1 12.2	Antibiotics	Synchronous lecturing/meeting	Quiz	Textbooks

• Teaching methods include: Synchronous lecturing/meeting; Asynchronous lecturing/meeting

• Evaluation methods include: Homework, Quiz, Exam, pre-lab quiz...etc

## 23 Evaluation Methods:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

<b>Evaluation Activity</b>	Mark	Topic(s)	Period (Week)	Platform
Assignments and Quizzes	20	<ul> <li>Quizzes in: Foundations, Disease Mechanisms, and Control and Treatment topics.</li> <li>Assignment in Characteristics of Disease-causing Microorganisms topics.</li> </ul>	3, 6, 10 & 12	E-Learning JUExams

Mid-term examinations	30	Foundations and Disease Mechanisms topics	Week 6 (Predicted)	JUExams	
Final Exam	50	All topics	Last week	JUExams	

# 24 Course Requirements (e.g: students should have a computer, internet connection, webcam, account on a specific software/platform...etc):

Computer, internet connection, and account on E-Learning and Microsoft Teams.

### **25 Course Policies:**

A- Attendance policies:
Students are recommended to attend every lecture.
B- Absences from exams and submitting assignments on time:
Any student with five or more unexcused absences from lectures can be legally dropped from the course.
C- Health and safety procedures:
N/A
D- Honesty policy regarding cheating, plagiarism, misbehavior:
Any act of cheating, or academic misconduct is subject to penalties. If students caught cheating, they will receive a zero on that test.
E- Grading policy:
20% (Assignments and Quizzes), 30% (Mid-term Examination), and 50% (Final Exam).
F- Available university services that support achievement in the course:

**E-Learning, and Microsoft Teams** 

26 References:

A- Required book(s), assigned reading and audio-visuals:

- Hogg, S. (2005). Essential Microbiology. West Sussex: John Wiley and Sons. Chicago, 15<sup>th</sup> ed.
- Kumar, S. (2012). Textbook of Microbiology. Jaypee Brothers Medical Publishers (P) Ltd, 1<sup>st</sup> ed.
- Talaro, Kathleen P. (2002). Foundations in microbiology. Boston :McGraw-Hill, 8th ed.

B- Recommended books, materials and media:

 The Short Textbook of Medical Microbiology (Including Parasitology) By Satish Gupte 10th Edition Price Rs. 632/- Published by Jaypee Brothers Medical Publishers (P.) Ltd. DOI: 10.3126/kumj.v8i2.3579 Kathmandu University Medical Journal (2010), Vol. 8, No. 2, Issue 30, 287.

# 27 Additional information:

Name of Course Coordinator: Dr. Zeinab H. Arabeyyat	Signature: Date: 14/02/2021
Head of Curriculum Committee/Department:	Signature:
Head of Department:	Signature:
Head of Curriculum Committee/Faculty:	Signature:
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