



The University of Jordan Accreditation & Quality Assurance Center

Course Syllabus

Course Name:

Introduction to Microbiology



1	Course title	Introduction to Microbiology
2	Course number	504204
	Credit hours (theory, practical)	3
3	Contact hours (theory, practical)	
4	Prerequisites/corequisites	None
5	Program title	Doctor of Medicine
6	Program code	
7	Awarding institution	The University of Jordan
8	Faculty	Faculty of Medicine
9	Department	Department of Pathology-Microbiology & Forensic Medicine.
10	Level of course	2 nd Year
11	Year of study and semester (s)	1 st Semester 2 nd Year
12	Final Qualification	
13	Other department (s) involved in teaching the course	
14	Language of Instruction	English
15	Date of production/revision	26/10/2016

16. Course Coordinator:

Dr. Asem A. Shehabi Office number: 23448

office hours

Office hours					
Day/Time	Sunday	Monday	Tuesday	Wednesda	Thursda
				y	y
	11-12			12-1	

email: ashehabi@ju.edu.jo

17. Other instructors:

Dr. Hassan Abu Al-Ragheb Dr. Ashaf Khasaweneh



18. Course Description:

This course is intended to introduce basic and important characteristics of normal body flora, microorganisms causing human infection as well as how to diagnose and control their diseases.

19. Course aims and outcomes:

A- Aims:

- 1. Mention types of microorganisms, their classification and structure.
- 2. Describe the pathogenesis and manifestations of diseases caused by microorganisms.
- 3. Describe methods of diagnosis of infections including; specimen selection, handling and processing.
- 4. Knowing major classes of antimicrobial agents, their mechanisms of action and the commonly used individual antimicrobials.
- **B- Intended Learning Outcomes (ILOs):** Successful completion of the course should lead to the following outcomes:
- A. Knowledge and Understanding: Student is expected to understand
 - A1- The basic cell structures of microorganism and their occurrence & role in human life
 - A2- The process of causing, prevention and treatment of infections with antimicrobial drugs
- **B.Intellectual Analytical and Cognitive Skills:** Student is expected to:
 - B1- Recognize the differences between microorganisms and their clinical diseases
 - B2- Understand principles and methods of diagnosing microbial diseases
- **C. Subject- Specific Skills:** Students is expected to:
 - C1- To know all important names of human commensal and pathogenic microorganisms.
 - C2- To know names of specific microbial diseases
- **D. Transferable Key Skills:** Students is expected to
 - D1- To be able to transfer knowledge to health professional colleagues.
 - D2- To be able to transfer instructions to patients

20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Bacteriology: 1- Part: Cell Structure and classification of bacteria- Growth and death of bacteria, Bacterial genetics- Control of Microorganisms- Sterilization and disinfection, Antimicrobial Agents	5 weeks 10 lectures	Prof. Dr. Asem Shehabi			

2- Part:-Gram- Positive	0.004			
Bacteria Cocci (Staphylococci ,	2 Weeks 4 lectures			
Streptococci, Enterococia),Bacilli				
(Bacillus,				
Corynebacteria),Gram – Negative Bacteria,				
Cocci (Neisseria), Bacilli –				
Enterobacteriaceae,				
Bacilli, Nonfermenting Organisms				
3- Part:- Spore forming				
anaerobes bacilli ,Aanaerobic Gram-	2 week 4			
negative bacilli,	Lectures			
Mycobacteri, Spirochetes,				
Chlamydia, Mycoplasma ,				
Legionella, Rickettsiae Fungi:				
- General Characteristics				
- Classification	2 week 4			
 Agents of superficial Infections 	Lectures			
- Agents of subcutaneous				
Infections - Agents of systemic				
Infections				
- Opportunistic fungi				
Homework:- Assign your	Due			
team and project, -Write proposal about your project	date:5th			
		Dullana		
Parasitology: Introduction and	2 Week 4 Lectures	Dr.Hassan Abu Al-		
Classification Protozoa: Ameba, Flagellates Sporozoa,		Ragheb		
Ciliates				
Helminthes: general features and life cycles. Nematodes-	1 Week 2			
intestinal, Tissue, Cestodes, Trematodes	lectures			
Arthropods				



Virology - general characteristics and	10 Weeks 10 lectures			
classification - Viral Replication - Viral genetics cultivation of viruses and their laboratory diagnosis - Antiviral agents - Pathogenesis of viral infections - Immunity to viral infections				
DNA Viruses- Parvoviruses, Papovaviruses- Adenoviruses, Herpesviruses- Poxviruses, Hepadnaviruses	3 Weeks 3 lectures	Dr. Ashaf Khasaweneh		
RNA Viruses - Picornaviruses, - Orthomyxoviruses, - Paramyxoviruses	3 weeks 3			
 Coronaviruses, Rubellavirus Rhabdoviruses, Reoviruses Retroviruses Hepatitis C virus, Hepatitis E virus 	lectures			
Others - Arthropod-borne viruses - slow & oncogenic viruses				

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following <u>teaching</u> and <u>learning</u> methods:

Teaching Method	ILO/s
Lectures and Discussions:	Will be presented
Homework and	Voluntary
Assignments:	-
Projects:	Not necessary
Presentation	Not necessary

22. Evaluation Methods and Course Requirements:

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

Evaluation	Point %	Date
Midterm Exam	40	Will be organized by
		ExaminationFaculty Office,
		mostly after 10-10 weeks
		from beginning the semester
Project		
Assignments		
Homework		
Final Exam	60	Will be announced by
		Examination Faculty Office

23. Course Policies:

	Attendance	
л-	ALLEHUALL	= DOHLIES.

B- Absences from exams and handing in assignments on time:

C- Health and safety procedures:

D- Honesty policy regarding cheating, plagiarism, misbehavior:

E- Grading policy:

0-39

45-49 D.
50-54 D
54-69 D+
60-64 C
65-69 C
70-73 C+
74-76 B
77-80 B
81-84 B+
85-89 A

90-100

F- Available university services that support achievement in the course:

24. Required equipment:
25. References:
1-Medical Microbiology, 18th Edition Edited by David Green Wood & Others Publisher: Churchill Livingstone 2-Jawetz Medical Microbiology, 23rd Edition Edited by Geo.F. Brooks & others Publisher: A Lange Medical Book Additional References: 3- Medical Microbiology Teaching Websites
26. Additional information:
Concerns or complaints should be expressed in the first instance to the module lecturer; if no resolution is forthcoming, then the issue should be brought to the attention of the module coordinator (for multiple sections) who will take the concerns to the module representative meeting. Thereafter, problems are dealt with by the Department Chair and if still unresolved the Dean and then ultimately the Vice President.For final complaints, there will be a committee to review grading the final exam. □ For moredetails on University regulations please visit: http://www.ju.edu.jo/rules/index.htm
Name of Course Coordinator:Signature: Date:
Head of curriculum committee/Department: Signature:
Head of Department: Prof.Abdelkader Battah Signature:
Head of curriculum committee/Faculty: Signature:
Dean:

<u>Copy to:</u> Head of Department Assistant Dean for Quality Assurance



Course File