

## Planning and Quality Assurance Affairs

Form (A)

### Course Specifications

#### General Information

Course name	General Microbiology
Course number	MDCN2312
Faculty	
Department	
Course type	College Needs
Course level	2
Credit hours (theoretical)	3
Credit hours (practical)	1
Course Prerequisites	

#### Course Objectives

1 - 1)	To provide basic knowledge of microorganisms and their relationship to humans in health and disease.
2 - 2)	To understand the basic structure of bacteria, viruses, fungi and protozoa as it relates to their pathogenicity and classification. Microbial physiology, genetics and control is covered in relation to medical microbiology.
3 - 3)	To introduce the students to the application of microbiology in different fields of medical practice
4 - 4)	Provide the students with the basic information about the different types of antimicrobial therapy, their use and their mode of action

#### Intended Learning Outcomes

Knowledge and Understanding	* The course introduces students to basic concepts of microorganism and human infections.
Intellectual Skills	* This course will prepare the student to think deeply in any case of infectious diseases in the future when he finished this basic course of microbiology
Professional Skills	* This course will build up the second year medical students with a solid basic concepts in the field of microbiology which will support their professional skills in diagnosis of infectious diseases while they are in the clinical study period
General Skill	* Understanding and practicing the basic knowledge of microorganisms and their relationship to humans in health and disease.



## Course Contents

- 1 - Introduction to the Microbial World
- 2 - Bacterial Cell – Structure and Function
- 3 - Classification of Bacteria and Diagnostic Methods
- 4 - Bacterial Physiology and Growth Requirements
- 5 - Bacterial Genetics
- 6 - Normal Flora of the Body
- 7 - Pathogenic Mechanisms
- 8 - Transmission and Spread of Microorganisms
- 9 - Antimicrobial Agents
- 10 - Sterilization and Disinfection
- 11 - Basic Virology part I and II
- 12 - Bacterial and viral vaccines
- 13 - Introduction to Mycology & Parasitology

## Teaching and Learning Methods

- 1 - The main teaching methods are PowerPoint lectures, seminars and discussion focusing groups.
- 2 - Also practical sessions as applications to what covered in the theoretical part

## Teaching and Learning Methods for the Disabled Students

- 1 - Almost all the same methods for others, but I did not met any disabled medical student in my class.

## Students Assessment

<u>Assessment Method</u>	<u>TIME</u>	<u>MARKS</u>
Three Quizzes	During the semester	30%
Midterm exam	Mid of the semester	20%
Final Theoretical exam	At the end of the semester	40%
Final Practical Exam	At the end of the semester	10%

## Books and References

Course note	Printed PowerPoint lectures
Essential books	1. Review_of_Medical_Microbiology_and_Immunology_by_Warren_E_Levinson_2020 2. Jawetz_Melnick__Adelbergs_Medical_Microbiology_-_27Edition
Recommended books	John Wiley & Sons, Limited, 2005 - Medical microbiology - 698 pages. By Fritz H. Kayser
Other References (Periodical, web sites, .... etc.)	CDC website; ECMD website and WHO website