



## **COURSE SPECIFICATION**

# (Medical microbiology)

# Faculty of Medicine-Mansoura University

# (A) Administrative information

(1) Programme offering the course.	MSc degree of clinical pharmacology		
(2) Department offering the programme.	Clinical pharmacology department		
(3) Department responsible for teaching the course.	Medical microbiology department		
(4) Part of the programme.	First part		
(5) Date of approval by the Department's council	10/7/2016		
(6) Date of last approval of programme specification by Faculty council	9-8-2016		
(7) Course title:	Microbiology		
(8) Course code:	CPHARM 507		
(9) Credit hours	1		
(10) Total teaching hours.	15		

# (B) Professional information

## (1) Course Aims:

The broad aims of the course are.

- 1. Acquire comprehensive knowledge of different mechanisms of Immune response & its relevant diseases.
- 2. Acquire basic knowledge of various aspects of medical virology and systemic bacteriology for better understanding of chemotherapy.

### (2) Intended Learning Outcomes (ILOs):

On successful completion of the course, the candidate will be able to:

### A- Knowledge and Understanding

- 1. Describe the general microscopic morphology of bacteria
- 2. Outline different phases of bacterial growth curve
- 3. Recognize the antigenicity of bacteria, their virulence factors and pathogenesis.
- 4. Describe the humoral and cell mediated immune responses and the role of complement system.
- 5. Identify abnormal immune response; Hypersensitivity and autoimmunity
- 6. Describe the clinical picture and line of treatment of mycobacterium T.B, typhoid and bacillary dysentery
- 7. Describe viral structure and steps of viral replication.
- 8. Discuss diagnosis, prevention and treatment of viral hepatitis, HIV, Herpes viruses and orthomyxoviruses.

#### **B-** Intellectual skills

- 1. Elaborate an effective antimicrobial policy.
- 2. Propose management of gastroenteritis and food poisoning situations.
- 3. Predict strategies of Infection prevention and control.

## (3) Course content:

Subjects	Lectures
Immune system & Types of immunity.	1
Antigens and immunoglobulins & complement system	1
Immune regulation and autoimmunity.	2
Hypersensitivity reactions.	1
General bacteriology (cell structure, growth curve and antimicrobial)	1
Gastroenteritis and food poisoning.	1
Enteric fever.	1
Bacillary dysentery.	1
Mycobacterium T.B.	1
General virology (Classification, structure and cell cycle)	1
Viral hepatitis.	1
HIV	1
Herpes viruses+ orthomyxoviruses.	2
Total teaching hours:	15

## (4) Teaching methods.

### 4.1 Lectures

## (5) Assessment methods.

- 5.1. written examinations for assessment of knowledge & intellectual ILOs
- 5.2: MCQ exam for assessment of knowledge & intellectual ILOs

### Assessment schedule.

إجمالي	السدرجة			الاختبار	المقرر
	عملي	شفهي	تعريري	ره حجب ر	ا <del>هر</del> ر
٥,			٤.	إختبار تحريرى مدته ساعة	1
			١.	اختبار MCQ	المقرر الاختياري

### (6) References of the course.

### 6.1. Text books.

- Medical microbiology department ( student book)
- lippincott medical microbiology
- Fundamentals of microbiology

### 6.2. Journals.

- Journal of Bacteriology & Parasitology
- International Journal of Medical Microbiology
- Annual Review of Immunology

## (7) Facilities and resources mandatory for course completion.

- Computer labs with open access to medical research databases
- Upgraded library
- Candidate's logbook.
- Internet with a wide range of learning support material.

### Course coordinators.

- Prof. Dr. Hussein el beltagy
- -Prof. Dr. Ali Gaballa
- Prof. Dr. Mohamed-Hesham Daba
- -Ass. Lecturer. Rania al Qatary

### Head of the department.

Prof. Dr. Hussein el beltagy