



COURSE SPECIFICATION

(Advanced Medical Bacteriology)

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme offering the course.	Programme for Postgraduate master degree of Medical Microbiology and Immunology		
(2) Department offering the programme:	Medical Microbiology and Immunology		
(3) Department responsible for teaching the course.	Medical Microbiology and Immunology dep.		
(4) Part of the programme:	Second part		
(5) Date of approval by the Department's council	7/8/2016		
(6) Date of last approval of programme specification by Faculty council	9/8/2016		
(7) Course title:	Advanced Medical Bacteriology		
(8) Course code:	MIC507AB		
(9) Credit hours	1 Credit hour		
(10) Total teaching hours.	15 h lectures		

(B) Professional information

(1) Course Aims.

The broad aims of the course are as follows: (either to be written in items or as a paragraph)

- 1- To give the candidate updated knowledge of the bacterial pathogenesis and virulence.
- **2-** To develop the candidate's advanced knowledge of antibacterial agents.
- **3-** To give the candidate updated knowledge of the bacterial infections.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories, knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

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

A- Knowledge and Understanding

- A 1 Outline the nanoparticle as bactericidal agents
- A2 Recognize new emerging and reemerging pathogens.
- A3 Recognize quorum sensing as factor of bacteria
- A4 Recognize human microbiota and its role in disease.
- A5 Recognize bacteria as bioterrorism agents.

2- Intellectual activities (I)

The Postgraduate Degree provides opportunities for candidates to achieve and demonstrate the following intellectual qualities.

B- Intellectual skills

- B1 Explain the role of nanopartciles in treatment of bacterial infections
- B2 evaluate antivirulent factor for the end of the era of antibiotics
- B3 Assess the role of quorum sensing in virulence and resistance of antibiotics
- B4 Interpret the value of probiotics as natural remedy to fight infection
- B5 Achieve a solution to bioterrorism agents

(3) Course content.

Subjects	Lectures	Laboratory	Field
nanoparticle as bactericidal agents	3hours		
emerging and reemerging pathogens	3hours		
quorum sensing	3hours		
human microbiota	3hours		
bioterrorism bacteria	3hours		

- (4) Teaching methods.
 - 4.1. Lectures
 - 4.2. Seminars
 - 4.3. Attending workshops and conferences
- 4.4 Observation of, assisting and discussion with senior medical staff
- (5) Assessment methods.
 - 5.1. Written exam for assessment of knowledge and intellectual ILOS
 - **5.3.** MCQ continuous assessment exam **for assessment of** knowledge and intellectual ILOS

Assessment schedule.

Percentage of each Assessment to the total mark: (assessment of the total microbiology course)

Written exam..., 40 marks

Other types of assessment.....None.....%....

Other assessment without marks.

- 1-Candidate Logbook which should be fulfilled and signed by Head of the department.
- 1 Attendance Criteria: Minimum acceptance attendance is 75%
- (6) References of the course.
- 6.1. Hand books. Hand out of lecturers

6.2. Text books....

- 1. Topley and Wilson's Microbiology and Microbial infections. 8 volume,2005,10th edition
- 2. Color Atlas and Textbook of Diagnostic Microbiology: Elmer W Koneman 2006.6th edition
- 3– Jawetz, Melnick and Adelbergs Medical Microbiology, 2004, 23rd edition.

6.3. Journals.

- 1. Clinical Microbiology Reviews
- 2. Journal of Clinical Microbiology
- 3. Journal of Medical Microbiology
- 4. Journal of Microbiological Methods
- 5. Indian Journal of Medical Research.

6.1. Websites.

- 1-Center for Disease Control -www.cdc.gov
- 2-World Health Organization-www.who.int
- 3-National Library of medicine- www.pubmed.com
- 4-MD Consult- www.mdconsult.com
- 1. Facilities and resources mandatory for course completion:
 - 1. Lecture halls.
 - **2**. Data shows and computer assistance.
 - 3. Reagents for mycological diagnosis

Course coordinator: Dr. Rasha Hassan

Head of the department: Prof. Dr. Mohammad Abou El ela Date: