



## COURSE SPECIFICATION

### (Advanced Medical Immunology)

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 | <b>9/8/2016</b>   |
| (7) Course title.   | Advanced Medical Immunology   |
| (8) Course code.  | MIC607AI  |
| (9) Credit hours  | 1 credits   |
| (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 provide the candidate with detailed exploration of elements of advanced medical immunology namely mucosal immune system, cancer vaccine
- 2-** To promote the candidate to understand the relation between the previous immunological diseases and the role of the immune modulation in their therapy.

### **(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 To describe the apoptosis, its mechanisms and its role in health and disease.
- A 2 To describe NK cells as a guide control in cancer from biological function to its therapy
- A 3 To describe the potential development of cancer vaccine
- A 4 To recognize the mucosal immune system, its components and their vaccines.

## **B- Intellectual skills**

B1. Recognize the apoptosis.

B 2 Predict the role of NK cells in cancer and its therapy.

B 3 Analyze the mechanism and role of cancer vaccine

### **(3) Course content.**

| <b>Subjects</b>                            | <b>Lectures</b> | <b>Laboratory</b> | <b>Field</b> |
|--|-----------------|-------------------|--------------|
| NK celb                                    | 3               |                   |              |
| Apoptosis in health and disease            | 5               |                   |              |
| Bone marrow transplantation                |                 |                   |              |
| Cancer vaccines                            | 2               |                   |              |
| Mucosal immune system and mucosal vaccines | 5               |                   |              |

### **(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

5.2MCQ exam for assessment of knowledge and intellectual ILOS

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

**Written exam.... 40 marks,**

**MCQ                      10 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:** Department theoretical books & handouts given by lecturers

**6.2. Text books....**

1. Immunology: Janis Kuby- 2003.

2. Basic Clinical Immunology. Fudenburg, Stites, Caldwell, Weils-1997

**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- Immunology

**6.1. Websites:**

**Nature Reviews:** <http://www.nature.com/nrg/focus/microgen/index.html>

National Library of medicine- [www.pubmed.com](http://www.pubmed.com)

MD Consult- [www.mdconsult.com](http://www.mdconsult.com)

**1. Facilities and resources mandatory for course completion.**

1. Lecture halls.

2. Data shows and computer assistance.

3. Immunology laboratory.
4. Chemicals for immunological techniques.

**Course coordinator:** Dr. Ghada maghawry – Dr. doaa tawfik

**Head of the department:** Prof. Mohammad Abou EL ela

**Date:**

**P.S. This specification must be done for each course.**