



### **COURSE SPECIFICATION**

### **Immunology**

# Faculty of Medicine-Mansoura University

# (A) Administrative information

(1) Programme offering the course:	Postgraduate Master degree of Internal Medicine	
(2) Final award / degree	Master degree	
(3) Department offering the programme:	Rheumatology and Immunology Unit, Internal Medicine Department	
(4) Department responsible for teaching the course:	Rheumatology and Immunology Unit, Internal Medicine Department	
(5) Part of the programme:	Second part	
(6) Course title:	Immunology	
(7) Course code:	MED 510ACI	
(8) Credit hours	1hours	
(9) Total teaching hours:		

# (B) Professional information

#### (1) Course Aims.

The broad aims of the course are as follows:

- Give an in-depth medical and technical knowledge on immunology
- Enable the candidates to apply basic principles of care of patients on immunology.

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

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

#### A- Knowledge and Understanding

<b>A1</b>	Innate immunity
A2	Adaptive immunity
<b>A3</b>	Cytokines
A4	Complement
A5	T-lymphocytes
<b>A6</b>	B-lymphocytes
A7	TCR
<b>A8</b>	Antigens

#### B- Intellectual skills

<b>B</b> 1	Assess problems of immune system
B2	Demonstrate immune defense mechanism .
В3	Differentiate between innate and adaptive immunity.
<b>B4</b>	Differentiate between T and B lymphocytes

# C-Professional/practical skills

C1	Develop skills innate and adaptive immune mechanism
C2	Demonstrate the methods of immune defense mechanism
С3	Carry out measures for identification of immunological disorders
C4	Be able to interpret different blood tests in immune patients
C5	Monitor equipment function, interpreting and utilizing information provided.

### D- Communication & Transferable skills

D1	Cooperate in teams in management of complications related to Immune Diseases.
D2	Learn & teach in groups during interpretation of patients data.
<b>D</b> 3	Practice self appraisal in solving problems related to patients, work management.
D4	Learn skills for planning and organization of infection control measures during practice

## (3) Course content.

Subjects	Lectures
Innate Immunity	2
Adaptive Immunity	2
Cytokines	1
Complement	1
B lymphocytes	1
T lymphocytes	1
Antigen presenting cells	1
Antigens	1
Apoptosis	1
T cell receptors TCR	1
MHC complex	1
Immunosuppression	1
Immunopotentiation	1
Total teaching hours	15

- (4) Teaching methods.
- 4.1: Lectures
- 4.2: Small group discussion with case study and problem solving
- (5) Assessment methods.
- 5.1: Written exam (16 marks),
- 5.2: Oral examination (20 marks).
- 5.3: MCQ (4marks).
- 5.4: **Total mark:** 40
- (6) References of the course.
- 6.1: Immunology; Allergic Disorders, in: Merck Manual
  - (7) Facilities and resources mandatory for course completion.

    Lecture halls and data show.

Course coordinator: Prof.Dr. Ehab Eltoraby Head of the department: Prof.Dr. Salah El gamal