



## COURSE SPECIFICATION

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.	Clinical pharmacology department
(4) Part of the programme.	Second 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.	Immunopharmacology
(8) Course code.	CPHARM 506 IP
(9) Total teaching hours.	15 h
(10) Credit hours.	1h

**(B) Professional information**

**(1) Course Aims:**

The broad aims of the course are.

1. Give the candidate the ability to understand different mechanisms of normal and abnormal immune response
2. Study in depth vaccination, immunosuppressive, anti-proliferative, anti-metabolic drugs and general recommendations in immunization.

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

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

### **A- Knowledge and Understanding**

1. Describe normal immune response.
2. Review abnormal immune response; Hypersensitivity, autoimmunity.
3. Describe immunopathogenesis, clinical manifestations and treatment of rheumatoid arthritis and systemic lupus erythromatosis (SLE).
4. List immunosuppressive drugs, Glucocorticoids, Calcineurin inhibitors and anti-proliferative drugs.
5. Review antimetabolites.
6. Describe immunosuppressive antibodies and immunostimulants.
7. Discuss vaccine and vaccination.
8. Outline general recommendations in immunization.
9. Describe general approach to organ transplantation therapy.

### **B- Intellectual skills**

1. Correlate the immunopathogenesis of disease states to pharmacotherapy affecting immune system.
2. Anticipate and detect adverse drug reaction and detect the molecular and pharmacological basis behind it.
3. Anticipate and avoid defined drug interactions

**(3) Course content:**

(1 credit theoretical= 1 teaching hour)

Subjects	Lectures	Laboratory
Normal immune response.	1	-
Abnormal immune response; Hypersensitivity, autoimmunity	1	-
Abnormal immune response (continue)	1	-
Rheumatoid arthritis.	1	-
SLE	1	-
Immunosuppressive drugs; Glucocorticoids, Calcineurin inhibitors	1	-
Immunosuppressive drugs (continue)	1	-
Antiproliferative	1	-
Antimetabolites	1	-
Immunosuppressive antibodies	1	-
Immunosuppressive antibodies (continue)	1	-
Immunostimulant therapy.	1	-
Vaccine and vaccination.	1	-
General recommendations in immunization.	1	-
General approach to organ transplantation Therapy.	1	-
<b>Total teaching hours:</b>	<b>15</b>	<b>-</b>

**(4) Teaching methods:**

4.1. Lectures

**(5) Assessment methods:**

5.1. **Written exam** for assessment of knowledge & intellectual ILOs

5.2. - **MCQ exam** for assessment of knowledge & intellectual ILOs

### Assessment schedule:

إجمالي	الدرجة			الاختبار	المقرر
	عملي	شفهي	تفريدي		
٥٠			٤٠	إختبار تحريري مدته ساعة	المقرر الاختياري
			١٠	إختبار MCQ	

### (6) References of the course.

#### 6.1. Text books.

Basic and clinical pharmacology (Katzung) [Last edition].  
Pharmacology (Rang and Dale) [last edition].  
Laurence pharmacology

#### 6.2. Journals.

Pharmacological reviews, ..... etc

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

- Computer labs with open access to medical research databases
- Upgraded library
- Induction course introducing study skills.
- 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.
- Dr.Mohamed Aboelkheir Abdallah
- Ass. Lecturer. Rania al Qatary

#### Head of the department.

**Prof. Dr. Hussein El Beltagy**