



## COURSE SPECIFICATION

## Immunology of parasitic diseases

# Faculty of Medicine- Mansoura University

# (A) Administrative information

(1) Programme offering the course.	Postgraduate Master degree of Medical Parasitology (PAR 508)	
(2) Department offering the programme.	Medical Parasitology Department	
(3) Department responsible for teaching the course.	Medical Parasitology Department	
(4) Part of the programme.	Second part	
(5) Date of approval by the Department's council	9-5-2016	
(6) Date of last approval of programme specification by Faculty council	9-8-2016	
(7) Course title:	Immunology of parasitic diseases	
(8) Course code.	PAR 508 IMP	
(9) Total teaching hours.	30hours	
(10) Credit hours	2 hours/week	

## (B) Professional information

#### (1) Course Aims...

#### This program is designed to provide candidates with the following:

- 1. Knowledge of the basic component of the immune system.
- 2. Information on general parasitic immunology, host–parasite relationship and parasite modulation of immune responses.

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

#### A- Knowledge and Understanding

- **A1.** Recognize the components of the immune system and its function:
  - -Innate cells, T cell immune responses, T cell receptors, structure of immunoglobulin.
  - -Complement activation and effector functions.
  - -Antigen processing and presesntation, antigen recognition by MHC.
- A2. Recognize regulatory immune responses induced to enhance or defeat parasitic infections.
  - -Treg, Breg cells: development, regulation, interactions.
- A3. Identify Intracellular parasitism, immune evasion, host- pathogen interaction *in vivo*.
- **A4.** Point out applications of parasitic therapy.
- **A5.** Explain the role of apoptosis and autophagy in parasitic diseases.

#### B- Intellectual skills

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

**B1.** Evaluate according to evidence the causal relationship of parasites and diseases.

- **B2**. Analyze basics parasite immune evasion strategies and host manipulation.
- **B3**. Interpret parasitic adaptation to host.
- **B4.** Analyze rationale for helminth therapy.

#### (3) Curriculum structure and contents.

#### \*Elective course

Subjects	Lectures (2/week)	Laboratory
	Total : 30	
I-Basic Immunology -Types of immunity -Immune cells -Immune responses II-Basic parasitic Immunology -Intracellular parasitism Parasitic antigen immune response -Regulatory B cells -Regulatory T cells	6 hours 24 hours	
-Parasite manipulation -Helminth therapy -Apoptosis and autophagy		

## (4) Teaching methods.

- 4.1. Lectures
- 4.2. Power point presentation
- 4.3. Essay discussion

## (5) Assessment methods.

- 5.1. Written exam for assessment of knowledge and intellectual ILOS.
- 5.2. MCQ for assessment of knowledge and intellectual ILOS.

Percentage of each assessment to the total mark:

Tools	Marks	Percentage of
		the total mark
Continuous assessment (MCQ)	20	20
Written exam	80	80
Total	100	

Other assessment without marks: seminars as described above included in the log book.

## (6) References of the course.

6.1. Scientific papers and review articles.

Useful link. PubMed. <a href="http://www.ncbi.nlm.nih.gov/pubmed/">http://www.ncbi.nlm.nih.gov/pubmed/</a>

6.2 Textbooks: department handbook

Facilities and resources mandatory for course completion.

Lecture halls and data show.

Course coordinator. Dr. Manar Sobh Azab Head of the department. Dr. Hala Ahmed El Nahas Date:/6/2026