



## COURSE SPECIFICATION

### **Histopathology of Parasites**

Faculty of Medicine– Mansoura University

#### (A) Administrative information

|   |   |
|---|---|
| (1) Programme offering the course.                                      | Postgraduate Doctorate degree of Medical Parasitology |
| (2) Department offering the programme.                                  | Department of Medical Parasitology                    |
| (3) Department responsible for teaching the course.                     | Department of Medical Parasitology                    |
| (4) Part of the programme.  | First 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.   | <b>Histopathology of Parasites</b>                    |
| (8) Course code.  | <b>(PAR 608 HP)</b>                                   |
| (9) Total teaching hours.   | 15hours / 15weeks                                     |
| (10) Credit hours   | 1 hour  |

## **(B) Professional information**

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

The broad aims of the course are as follows:

1. Enable the student to study the pathogenesis and immunopathology of parasitic diseases.
2. Help the student to have the fundamental knowledge about immuno-histochemical study of parasitic diseases.
3. Qualify the student to recognize the recent molecular pathology principles and their possible application in Parasitology field.

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

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

#### **A. Knowledge and Understanding**

- a1.** Identify the gross changes of different tissues in parasitic diseases.
- a2.** Distinguish the microscopic pathological changes in parasitic infections.
- a3.** Describe the immunohistochemical changes of tissues in parasitic morbidity.
- a4.** Define the principles of molecular pathology and application of its techniques in Parasitology field.
- a5.** Characterize the molecular pathological changes of tissues in parasitic disorders.

#### **B. Intellectual skills**

- b1.** Interpret the clinical, gross, and microscopic findings to reach the proper diagnosis.
- b2.** Choose the proper immunohistochemical techniques.

### (3) Course content.

| Subjects   | Lectures | Total Teaching Hours |
|--|----------|----------------------|
| <b>General pathology</b><br>-The cell and human body-<br>types of pathologic lesions<br>-Diagnostic and Molecular<br>pathology                                   | 1<br>2   | 3 hours              |
| <b>Pathology of helminthic<br/>parasitic diseases</b><br>-Trematodes<br>-Cestodes<br>-Nematodes  | 1x3      | 3 hours              |
| <b>Pathology of protozoal<br/>parasitic diseases</b><br>-Amoeba and Flagellates<br>-Malaria<br>-Toxoplasma & other<br>Coccidia                                   | 1x3      | 3 hours              |
| <b>Immunopathology</b><br>-Basics of immunopathology<br>of parasitic infections &<br>special reference to granuloma  | 1x3      | 3 hours              |
| <b>Immunohistochemical study</b><br>-Antigens and antibodies-<br>sample preparation<br>-Basic Immunohistochemistry<br>techniques-applications in<br>Parasitology | 1<br>2   | 3 hours              |

### (4) Teaching methods.

- 4.1. Lectures.
- 4.2. Power point presentation.
- 4.3. Essay discussion.
- 4.4. Seminar one hour/ 4 weeks about the recent advances in this field.

## (5) Assessment methods.

5.1. Multiple choice questions (MCQ) exam for assessment of knowledge and intellectual ILOs (at the end of first semester).

5.2. Written exam for assessment of knowledge and intellectual ILOs (at the end of first semester).

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.

### Text books (available at the library):

- Advances in Parasitology, 2015.
- Parasitology, Chatterjee KD. CBS; New Delhi. 2014.
- Medical Parasitology, Arora DR, Arora BB, 2014.
- Foundations of Parasitology, Larry SR, John J and Steve Nadler. McGraw-Hill; New York. 2013.
- Human Parasitology, Bogitsh BJ and Carter CE. Academic Press; Boston. 2013.
- Panikers Textbook of Medical Parasitology, Paniker CJ. Jaypee; New Delhi, 2013.
- Principles and Practice of Clinical Parasitology, Gillespie SH and Pearson RD. John Wiley and Sons; LTD. 2001.
- Clinical Parasitology, Beaver PC, Jung RC and Cupp EW (Eds). 9<sup>th</sup> edition, Lea and Febiger; Philadelphia. 1984.
- Pathology of Protozoal and Helminthic Diseases, Marcial-Rojas, RA. Williams and Wilkins Co.; Baltimore. 1971.

### Periodicals:

- The Journal of Pathology.
- The American Journal of Pathology.
- Advances in Parasitology.
- Trends in Parasitology.
- PLoS Neglected Tropical Diseases.
- International Journal of Parasitology.
- Acta Tropica.

- Parasitology Research.
- Parasitology.
- Experimental Parasitology.
- Journal of Parasitology.
- Journal of Parasitology Research.
- Annals of Tropical Medicine and Parasitology.
- Malaria Journal.
- American Journal of Tropical Medicine and Hygiene.
- Journal of Infectious Diseases.

**Web sites:**

- <http://www.ncbi.nlm.nih.gov/pubmed/>
- <http://www.ncbi.nlm.nih.gov/gquery/>

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

Lecture halls and data show.

**Course coordinator: Prof. Samar Nagah El-Beshbishi**

**Head of the department: Prof. Hala Ahmed El Nahas**

**Date: -----**