



## COURSE SPECIFICATION

### (Elective course: Hematopathology)

Faculty of Medicine– Mansoura University

#### (A) Administrative information

(1) Programme offering the course:	Postgraduate PhD degree of Pathology
(2) Department offering the programme:	Pathology department
(3) Department responsible for teaching the course:	Pathology department
(4) Part of the programme:	Second part
(5) Date of approval by the Department's council	26/7/2016
(6) Date of last approval of programme specification by Faculty council	9/8/2016
(7) Course title:	Elective course
(8) Course code:	PATH 605 HEP
(9) Total hours:	5 credit hours
(10) Total teaching hours:	75 hours

## **(B) Professional information**

### **Course Aims:**

- 1--To acquire detailed informations about non neoplastic lymph node, bone marrow, spleen and thymus diseases, their pathogenesis, morphologic features , prognosis, fate and complications
- 2-To provide molecular background for non neoplastic lesions
- 3-To clarify molecular pathogenesis for hemopoietic tumors
- 4-To enhance ability to differentiate tumors based on morphologic features, and immunohistochemical features
- 5-To support implementation of different ancillary diagnostic techniques for approaching diagnosis in problematic cases
- 6-To help correlating pathologic parameters to prognosis and therapy
- 7-To provide the skill for interpretation of tissue biopsy from these related organs
- 8- To support applying and integrating data for problem solving in tissue biopsy interpretation
- 9- To help handling and processing of related specimens in different pathologic conditions
- 10- To guide applying grading and staging of tumors

### **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**

**A1.** Identify altered structure and function of the hemopoietic and reticuloendothelial systems that are seen in various diseases; definition, etiology, pathogenesis, prognosis, fate & complications of such diseases.

**A2.** Describe the morphological features of different types of tumors the hemopoietic and reticuloendothelial systems

**A3.** Classify tumors of the hemopoietic and reticuloendothelial systems . Gradding and staging according to the recent WHO classification

**A4.** Describe and discuss characteristic morphological pattern (macroscopic and microscopic) of different pathologic lesions within the hemopoietic and reticuloendothelial systems and their underlying pathogenesis and molecular basis

**A5.** To identify recent advances in pathology processes and relate structural and functional changes and the associated clinical manifestations

#### **B- Intellectual skills**

**B1.** Interpret findings of pathological specimens effectively

**B2.** Analyze various gross and microscopic pathologic data resulting from the disease process.

**B3.** Enlist the differential diagnosis of various gross and microscopic pathologic features to reach proper evidence based diagnosis.

**B4.** Relate the clinical data, investigational data and patient history to reach proper pathologic diagnosis with proper time managing.

**B5.** Analyze different problems of misdiagnosis.

**B6.** Discuss problematic cases with senior staffs and supervisors to improve professional performance.

#### **D- Communication & Transferable skills**

**D1.** Present adequately themselves by improving descriptive capabilities and communication skills and respond positively to feedback.

**D2.** Respect ethical relationship with staff and ethics in research.

**D3.** Present attitudes that will maximize their educational experiences via continous search in data base

and lifelong learning.

**D4:** Work in inter-professional teams

## Course content

### **A: Non neoplastic diseases (2 credit hours; 30 teaching hours)**

- 1-Different aspects of evaluation of lymph node ,spleen,and bone marrow specimens including needle biopsies and aspirates
- 2-Primary immunodeficiencies
- 3-Patterns of LN hyperplasia
- 4-Inflammatory/ hyperplastic diseases
- 5-LN inclusions
- 6-Splenic cysts
- 7-Hypersplenism
- 8-Alterations in bone marrow cellularity
- 9-Bone marrow necrosis
- 10-Lipid storage diseases affecting bone marrow
- 11- Bone marrow transplantation
- 12-Non neoplastic diseases of thymus
- 13-Other non neoplastic lesions

### **B: neoplastic diseases (3 credit hours; 45 teaching hours)**

- 1-Lymphomas
- 2-Leukemias and related disorders
- 3-Histiocytic tumors and related disorders

4-Tumors of cells of accessory immune system

5-Plasma cell dyscrasias

6-Mastocytosis

7- Chronic myeloproliferative disorders

8-Myelodysplastic syndromes

9-Vascular tumors

10-Thymoma

11-Other thymic tumors

12-Other primary tumors

13-Metastatic tumors

14- Tumor like conditions

### **Assessment schedule.**

- Final written exam with total of 80 marks
- MCQ continuous assessment of 20 marks

### **Other assessment without marks.**

1-Attendance Criteria: Minimum acceptance attendance in each course is 75%

2- Log book should be fulfilled and signed by Head of the department

### **References of the course.**

**6.1. Hand books:** Course notes: Book authorized by department

**6.2. Text books:** Rubbin's text book of pathology, Ackerman's surgical pathology, Sternberg's surgical pathology & Soft tissue tumors

**6.3. Websites:**

- <http://www.pathmax.com>

- United States and Canadian Academy of Pathology (USCAP): <http://www.uscap.org/>

- The Royal Collage of pathologists: <http://www.rcpath.org/>

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

- Lecture halls and data show
- Pathology labs. in various Mansoura university medical centers
- Pathology Archives of slides and tissue for problematic cases
- Extensive library and other learning resources
- Computer laboratories with a wide range of software
- Internet with a wide range of learning support material

**Course coordinator: Dr. Reham Nagib**

**Head of the department: Prof. Dr. Khaled Zalata**