



COURSE SPECIFICATION

(Elective course: cardiovascular and respiratory)

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:	Cardiovascular and respiratory
(8) Course code:	PATH 605 CR
(9) Total hours:	5 credit hours
(10) Total teaching hours	75 Ours

(B).Professional information

(1) Course Aims:

- 1-To acquire detailed information about non neoplastic pulmonary diseases, their pathogenesis, morphologic features, prognosis, fate and complications
- 2-To provide molecular background for non neoplastic lung lesions
- 3-To clarify molecular pathogenesis for pleural and pulmonary 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 support applying and integrating data for problem solving in tissue biopsy as well as pulmonary and pleural cytology
- 8- To help identification of different disease in cardiovascular system
- 9-To provide the skill for interpretation of myocardial, pulmonary and pleural biopsy
- 10-To guide applying grading and staging of pulmonary tumors

(2).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 cardiovascular and respiratory 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 in the cardiovascular and respiratory systems .
- A 3.** Classify tumors of the cardiovascular and respiratory 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 cardiovascular and respiratory 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 continuous search in data base and lifelong learning.

D4. Work in inter-professional teams to enhance patient safety and improve patient care quality.

(3): Course content.

I-Pulmonary pathology

A-Non –neoplastic pulmonary diseases(2 credit hours;30 teaching hour)

1-Anatomy and histology of lung

2-Tissue sampling and preparation

3-Lung defense

4-Congenital and developmental disorders

5-Acute lung injury

6-Aspiration, bronchial obstruction, bronchiectasis , and related disorders

7-Aquired non neoplastic neonatal and pediatric diseases

8-Lung infections

9-Asthma and related eosinophilic infiltrates

10-Histiocytosis and storage diseases

11-Hypersensitivity pneumonitis

12-Granulomatous diseases

13-Interstitial pneumonia

- 14-Collagen vascular diseases
- 15-Radiation and drug toxicity
- 16-Endogenous mineralization, inclusions, and deposition diseases
- 17-Pneumoconiosis
- 18-Emphysema and chronic bronchitis
- 19-Small airway diseases
- 20-Vascular diseases
- 21-Lung transplantation pathology
- 22-Non neoplastic pleural diseases

B-Neoplastic pulmonary diseases(1 credit hour ;15 teaching hours)

- 1-Preinvasive lesions
- 2-Pulmonary and pleural tumors

C-Pulmonary and pleural cytology(1 credit hour;15 teaching hours)

II-Cardiovascular system pathology(1 credit hour; 15 teaching hours)

- 1- Diseases of the heart
- 2-Diseases of blood vessels
- 3-Myocardial biopsy
- 4-Heart transplantation
- 5-Cardiac valves
- 6-Coronary artery bypass
- 7-Cardiac tumors
- 8-Diseases of pericardium

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.repath.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 Nageeb**

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