



## COURSE SPECIFICATION

### (General Molecular Pathology and Immunohistochemistry)

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.	First 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.	General Molecular pathology and Immunohistochemistry
(8) Course code.	PATH 605 MP
(9) Total hours.	5 credit hours
(10) Total teaching hours.	75 hours

## **(B) Professional information**

### **(1) Course Aims:**

The broad aims of the course are as follows:

1-To support our candidates the acquisition of basic knowledge of molecular pathology

2-To prepare our candidates to acquire the molecular rational of disease pattern and their underlying mechanisms within the specific organ systems.

### **(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 the basic concepts in molecular biology

**A2:** Recognize Genetic and epigenetic mechanisms

**A3:** Explain Principles and practice of molecular pathology

**A4:**Recognize Molecular pathogenesis of different diseases

**A5:**Recognize the integration of cellular and molecular pathogenesis

## B- Intellectual skills

**B1.**Differentiate molecular techniques relevant to diagnosis as FISH, PCR, and flow cytometry

**B2.** Relate the molecular mechanisms to the morphological changes in different disease processes,.

**B3.**Analyze Molecular pathogenesis of different diseases

### (3) Course content.

Topic	Credit hours	Teaching hours
Concepts in molecular biology	0.5	7.5
Genetic and epigenetic mechanisms	0.5	7.5
Principles and practice of molecular pathology	1	15
Molecular pathogenesis of different diseases	2	30
Integration of cellular and molecular pathogenesis	1	15
<b>Total</b>	<b>5</b>	<b>75</b>

#### **(4) Course schedule**

One semester (5 credit hours)

#### **(5) Teaching methods:**

- 1: Lectures & Seminars, power point aided.
- 2: Conferences

#### **(6) Assessment methods:**

Written exam: 80 marks; 80% of the total mark

MCQ exam: 20 marks; 20% of the total mark

#### **Other assessment without marks:**

- 1-Attendance Criteria: Minimum acceptance attendance in course is 75%
- 2- Log book should be fulfilled and signed by Head of the department

#### **(7) References of the course:**

6.1. Hand books.

6.2. Text books: Molecular Pathology Library Series 2009

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/>

**(8) 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 Mohamed Nagib**

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