



COURSE SPECIFICATION

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Program offering the course.	Postgraduate Doctor Degree in Clinical Pathology-CPATH 630
(2) Department offering the program	Clinical Pathology
(3) Department responsible for teaching the course:	Clinical Pathology
(4) Part of the program	Second Part (elective)
(5) Date of approval by the Department's council	15 – 6 - 2016
(6) Date of last approval of program specification by Faculty council	9/8/2016
(7) Course title	Principles of molecular genetics
(8) Course code	CPATH 630 PMG
(9) Credit hours	1
(10) Total teaching hours:	15

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows: (either to be written in items or as a paragraph)

The overall aim of the course is to:

Provide the student with the necessary knowledge on DNA and its role in pathogenesis and diagnosis of genetic diseases

(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-Recognize basic DNA and gene structure

A2-Describe the principles of microbial genetics

A3-Define genomics and epigenetics

A4-Classify gene mutations and polymorphisms

B- Intellectual skills

B1- Use the molecular basis of cancer in clinical practice

B2- Interpret HLA molecular typing data

B3- Analyze genotype-phenotype relationship

B4- Distinguish different phases of cell cycle

(3) Course content:

Subjects	Lectures	Clinical	Laboratory	Field	Total Teaching Hour
Basic DNA structure	1				1
Gene structure and expression	1				1
Methods of DNA analysis	1.5				1.5
Gene mutations	1.5				1.5
Gene polymorphisms	1				1
The cell cycle	1.5				1.5
Molecular basis of Cancer	1.5				1.5
DNA-based HLA typing	1.5				1.5
Microbial genetics	1.5				1.5
Microbial phylogenetic analysis	1.5				1.5
Human Genome project, genomics & epigenetics	1.5				1.5

(4) Teaching methods:

4.1: Lectures

4.2: Self-learning

4.3: Student teaching

(5) Assessment methods:

5.1: Written exam for assessment of knowledge & intellectual skills.

5.2: Oral exam for assessment of knowledge , intellectual & communication skills.

5.3: MCQ continuous assessment at the end of each semester.

Percentage of each Assessment to the total mark.

Written exam: 60%(24marks)

Oral exam: 25%(10 marks)

MCQ exam: 15 % (6 marks)

Total : 100 % (40 marks)

(6)References of the course:

6.1: Text books: William's Hematology

6.2: Journals: Nature Genetics

Course coordinator: Prof. / Tarek Selim

Head of the department: Prof. / Osama Elbaz