



COURSE SPECIFICATION

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Program offering the course.	Postgraduate Master Degree in Clinical Pathology-CPATH 530
(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	16/5/2016
(6) Date of last approval of program specification by Faculty council	9/8/2016
(7) Course title	Immune-based laboratory techniques
(8) Course code	CPATH 530 IBLT
(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 technical knowledge of laboratory techniques based on the phenomenon of antigen –antibody interactions

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

A- Knowledge and Understanding

A1-List factors influencing antigen-antibody interactions

A2-Recognize basic principles of flow cytometry

A3-Define chemiluminescence and bioluminescence

A4-Describe the principles of immunodiffusion and labeled immunoassay techniques

B- Intellectual skills

B1- Interpret flow cytometer data print out

B2- Use laboratory data for selection of proper donor for transplantation

B3- Employ the different patterns of immunoelectrophoresis in clinical diagnosis

B4- Distinguish between different types of labeled immunoassays

(3) Course content.

Subjects	Lectures	Clinical	Laboratory	Field	Total Teaching Hour
Antigen- antibody interactions	1				1
Immunodiffusion techniques	1				1
Labeled immunoassay techniques	2				2
Immunoelectrophoresis	1.5				1.5
Chemiluminescence and bioluminescence	1				1
Automated immunoassay	1				1
Transplantation immunology work up	2				2
Autoantibodies detection by IF techniques	1				1
Automated autoantibodies detection	1				1
Immunoglobulin and complement detection	1				1
Flow cytometry : basic principles	1				1
Flow cytometry : clinical applications	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 skills.

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

Percentage of each Assessment to the total mark.

Written exam. 60% (36 marks)

Oral exam. 25% (15 marks)

MCQ exam. 15% (9 marks)

Total. 100% (60 marks)

(6) References of the course.

6.1. Text books: Tietz textbook of Clinical Chemistry and molecular diagnostics

6.2. Journals: The Egyptian Journal of Immunology

Course coordinator: Prof. Tarek Selim

Head of the department: Prof. Osama Elbaz