COURSE SPECIFICATION

Clinical Chemistry

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course:	MD Degree of Histology & Cytology
(2) Department offering the programme:	Histology and Cell Biology Department
(3) Department responsible for teaching the course:	Clinical pathology
(4) Part of the programme:	Second part
(5) Date of approval by the Department`s council	3-5-2016
(6) Date of last approval of programme specification by Faculty council	**8-9-2016**
(7) Course title:	Clinical chemistry
(8) Course code:	HIST 602 CC
(9) Credit hours:	2
(10) Total teaching hours:	30

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

The aim of this course is to prepare the candidate to be professional in the field of clinical chemistry through increasing his/ her awareness about:

1. The laboratory data of normal human and different pathological conditions
2. The significance of laboratory data in diagnosis of many 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

A 1- Recognize the basic physiology of the renal function
Identify the basic categories of renal diseases (glomerunephiritis, acute and chronic renal failure, and uremic syndrome)
A 2- Recognize the laboratory analytic methods for the assessment of renal function
A 3- Discuss the aetiology of liver diseases and the causes of hepatocellular injury
A 4- Describe the dynamics of the liver enzymes and their clinical utility
A 5- Know the liver nonenzymes analysis as albumin,ammonia, bile acids, urea, cholesterol.
A 6- Recognize the clinical manifestation of pancreatic disorders and its diagnostic methodologies
A 7- Discuss physiology, biosynthesis and metabolism of hormones secreted from adrenal gland.
Know the definition, classification, biochemistry and distribution of tumor markers
A 8- Identify the pathophysiology of congestive heart failure and myocardial infarction
A 9- Recognize the utility of different markers of coronary artery diseases.

B1 Integrate basic laboratory data used to asses' different diseases as cardiac, kidney, liver, gastrointestinal diseases.

B 2 Analyze laboratory data of normal human.

(3) Course content:

Subjects	Lectures	Clinical	Laboratory	Seminars	Total Teaching Hours
1- Renal function tests • Glomerular • Tubular	 3 3	-----	-----	----	6
2- liver function tests • aetiologyof liver diseases • actual liver function • hepatocellular injury	 2 2 2	-----	----	-----	6
3- pancreatic disorders 4- adrenal gland 5- tumor markers 6- Markers of coronary artery diseases.	4 5 4 5	-----	-----	-----	18

(4) Teaching methods:

4.1: Lectures

4.2: Self learning (internet search for specific topics)

(5) Assessment methods:

Written exam (80%) = 40 marks

MCQ exam (20%) = 10 marks

Total: 50 marks

(6) References of the course:

6.1: **Hand books:** Guide to clinical pathology book.

6.2: **Text books:** Tietz textbook of clinical chemistry and molecular diagnosis.

6.3: **Journals:** Clinical Chemistry Journal.

(7) Facilities and resources mandatory for course completion:

Data show for power point presentations

Library

Computers

Course coordinator: Dr. Shireen Mazroa

Assistant coordinator: Dr.Walaa Hamed

Head of the department: Prof Dr. Salwa Gawish

Date: