

## Course Specifications

**Course title:** Clinical Pathology

Allocated marks : 40 marks

Course duration : 16 hours

Course director : Prof. Hasan Abd-Elghaffar, Head of Clinical Pathology Department

Teaching staff : 26 Professors, 14 assistant professors, 26 lecturers, and 30 assistant lecturers.

### I. Overall aims of the Course

- To support acquisition of knowledge and understanding of health and disease.
- To enable the student to interpret the findings and construct diagnostic plans.
- To make the student capable of making a diagnostic investigations for each disease.

### II. Intended learning Outcomes of courses (ILOs):

#### (A) Knowledge and Understanding:

By the end of the program, the medical graduate will be able to:

- 1- Identify molecular, biochemical, and cellular mechanisms which are important in maintaining the body homeostasis.
- 2- Enumerates common types of diseases affecting the body systems.
- 3- Enlist different types of investigations needed for diagnosis of various diseases.

#### (B) Intellectual Skills:

By the end of the program, the medical graduate will be able to:

- 1- Use personal judgment for analytical and critical problem solving.
- 2- Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

#### (C) Clinical and Practical Skills:

By the end of the program, the medical graduate will be able to:

- 1- Perform venepuncture and collect blood samples.
- 2- Insert a cannula into peripheral vein.
- 3- Give intramuscular, subcutaneous, intradermal and intravenous injections.
- 4- Perform and interpret basic bedside laboratory tests.

#### (D) Transferable Skills:

By the end of the program, the medical graduate will be able to:

- 1- Perform effective communication with the patient and the tutor and practice how to break bad news in a roleplay or in a clinical case.
- 2- Retrieve, manage and manipulate information by all means, including electronic means.

### **(E) Professional Attitudes and behavioral skills:**

By the end of the program, the medical graduate will be able to:

- 1- Recognize the important role played by other health care professions in patients' management.
- 2- Demonstrate respect and work cooperatively with other health care professions for effective patient management.

### **III. Course contents:**

<b>Topics</b>	<b>Lecture (hrs)</b>
<b>Anemias</b>	1
<b>Hemolytic disorders</b>	1
<b>Leucocyte disorders</b>	1
<b>Hemostasis</b>	1
<b>Transfusion</b>	1
<b>Adrenal and thyroid function test</b>	1
<b>Liver and Kidney Function tests</b>	1
<b>Diabetes and dyslipedemia</b>	1
<b>Calcium, Tumour markers Fetoplacental function</b>	1
<b>Hypersensitivity</b>	1
<b>Immune deficiency syndromes</b>	1
<b>Sampling and diagnosis of clinical microbiology</b>	1
<b>Clinical virology and Mycology</b>	1
<b>Laboratory diagnosis of viral and fungal infections</b>	1
<b>Laboratory diagnosis of bacterial infections</b>	1
<b>Transfusion medicine</b>	1

### **IV. Teaching & learning Methods:**

#### **1- Illustrated Lectures:**

Large group plenary sessions in lecture theatres are timetabled, 1hour weekly. They are not intended to convey factual information with students busy taking notes. Instead they are akin to 'key-note addresses', designed to support self education principle. They set the scene for a particular topic, highlight important issues and, hopefully, arouse curiosity in relevant areas. It is left to students to go and explore the subject in critical detail.

#### **2- Seminars:**

Students are expected to search and prepare certain topics in a team work manner. This work will be orally presented:

- Lab. approach to the diabetic patients.
- Approach to a patient with jaundice.
- Approach to a patient with renal failure.
- Approach to a patient with heart failure.

- Approach to a patient with metabolic coma.
- Anticoagulants, antiplatelets, and thrombolytic therapy.
- Approach to a patient with poly arthritis.
- Approach to a patient with anemia.

### **3-Tutorials:**

Small groups of students are allowed to visit the different units of the clinical pathology department to acquire the medical skills and learn how to interpretate the clinical laboratory tests.

### **4- Assignment:**

Each student completes a critical review on a selected topic. The review must be frilly referenced and submitted in word-processed form 1200 word at least and delivered in a known dead time.

Time plan:

- Lecturer: one hour weekly for 16 weeks for 5th academic year stating in 2nd term.
- Seminars: arranged on a monthly basic.
- Assignments: accepted at the end of the teaching course as a dead time.

## **V. Teaching and learning facilities:**

Facilities used for teaching this course include:

- Lecture halls
- Rooms for small groups teaching
- Black and white boards
- Audio visual aids (data shows, overhead, slide projector,.....etc.)
- Electronic library
- Skills lab.

## **VI. Assessment:**

- MCQ exam. (30 marks):  
15 Questions covering different topics (30 min).
- Oral exam. (10 marks)

## **VII. List of References:**

- Clinical Pathology Department book.
- Lecture notes in clinical biochemistry.
- Lecture notes in Hematology
- Essentials of hematology
- Cruickchank in Bacteriology
- Essential in Immunology
- Handout of lectures
- CDs of clinical pathology in the electronic library