



COURSE SPECIFICATION

MSc Tropical Medicine –First part

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Program offering the course.	MSc Tropical Medicine (TROP 504)
(2) Department offering the program.	Tropical Medicine
(3) Department responsible for teaching the course.	Medical Biochemistry
(4) Part of the program.	First Part – Biochemistry
(5) Date of approval by the Department`s council	27/5/2016
(6) Date of last approval of program specification by Faculty council	9/8/2016
(7) Course title.	Biochemistry
(8) Course code.	TROP 504
(9) Credit hours	0.5 credit hour
(10) Total teaching hours.	7.5 hour

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows.

1- Provide knowledge and understanding of biochemical aspects of common infectious pathogens and common hepatic & gastrointestinal disorders together with understanding of basics of immune defense mechanisms.

(2) Intended Learning Outcomes (ILOs):

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

A- Knowledge and Understanding

- A1- Review importance, chemical structure and classification of carbohydrates, lipids, and proteins
- A2- Describe nucleotides, nucleic acids, genetic code and protein synthesis
- A3- Summarize DNA replication, transcription and post transcriptional modification of RNA.
- A4- Describe regulation of gene expression and mutation
- A5- Recognize mechanisms of DNA damage, DNA repair and diseases related to defective repair and the role of ROS
- A6- Describe genetic engineering and recombinant DNA techniques, animal and human cloning
- A7- Recall the structure of proteins of the extra-cellular matrix
- A8- Discuss the immune system structure and types of immunoglobulin

following intellectual qualities:

B- Intellectual skills

B1. Integrate the basic science of biochemistry into clinical practice to explain the various phenomena of infectious disorders.

B2- Integrate the biochemical aspects of enzymes and vitamins in diagnosis of infectious diseases

B3- Relate principles of gene therapy to management of infectious diseases

B4- Relate types, sources and effect of free radicals and antioxidants to prevention of infectious diseases

(3) Course content.

Subjects	Lectures	Laboratory	Total Teaching Hours
Biochemical & metabolic function of the liver	1		0.5
Biochemical changes in liver diseases	1		0.5
Bile metabolism it's abnormalities	1		0.5
Clinical enzymology	1		0.5
Vitamins & vitamin deficiencies	1		0.5
Hormones	1		0.5
ROS & antioxidants	1		0.5
Xenobiotic metabolism and role of the liver	1		0.5
Prophyrias	1		0.5
Biochemical tumor markers	1		0.5
DNA . -organization, codon & replication - Stability & mutation - Damage & repair	2		1
Protein biosynthesis	1		0.5
Recombinant DNA technology & it's application in medicine	2		1
TOTAL	15		7.5

(4)Teaching methods.

4.1. Lectures.

4.4. Problem-solving (case study) sessions

(5) Assessment methods.

5.1....Written exam for assessment of.....(A1 to A8) and (B1 to B4)

5.2....Oral exam for assessment of.....(A1 to A8)

5.3:.....MCQ exam for assessment of.....(A1 to A8) and (B2 to B4)

Assessment schedule.

Written exam (60%) 72 marks

MCQ: (20% of written 18 marks

Oral exam. (40%) 60 marks

Other assessment without marks: No

(6) References of the course.

6.1: Hand books.... Lippincott's Reviews of Biochemistry.

6.2: Text books Text book of Biochemistry with Clinical Correlations, Harper's Illustrated Biochemistry.

6.3: Journals.... Journal of Tropical Medicine and Hygiene

6.4: Websites.... <http://www.kumc.edu/biochemistry/resource.html>,

<http://www.medlib.iupui.edu/ref/biochem.htm>.

6.5: Others.....

(7)Facilities and resources mandatory for course completion.

- Lecture hall and data show

Course coordinator: Assistant Prof. Mahmoud Abdel-Aziz Abdel-Hamid
Assistant : Dr. Mohamed EL Diasty
Dr. Walaa Shabana

Head of the department: Prof. Mahmoud El-Bendary

Date: