



COURSE SPECIFICATION

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course.	Medical Doctorate in Tropical Medicine
(2) Department offering the programme.	Tropical Medicine
(3) Department responsible for teaching the course.	Medical Physiology
(4) Part of the programme.	1 st Part
(5) Date of approval by the Department's council	11-5-2016
(6) Date of last approval of programme specification by Faculty council	9-8-2016
(7) Course title.	Applied Physiology related to Tropical Medicine
(8) Course code.	TROP 603
(9) Credit hours	2 hours
(10) Total teaching hours.	30 hour

(B) Professional information

(1) Course Aims.

The broad aims of the course are as follows.

Provide updated knowledge and understanding of the physiologic background and correlation to infectious disease & tropical disorders to obtain clinical and practical benefits.

(2) Intended Learning Outcomes (ILOs).

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

A- Knowledge and Understanding

- A-1. Define body temperature and know the mechanism concerned with its regulation
- A-2. Identify the process of thermogenesis and recognize its clinical implications
- A-3. Describe energy storage, food intake and review its causal relationship with each other.
- A-4. Identify both splanchnic and capillary circulations and explain its importance and relevance and regulatory mechanisms of shock.
- A-5. Summarize important rules of acid-base balance and how to control extracellular volume osmolarity.
- A-6. Identify the regulatory mechanisms of body fluid, body temperature and metabolism.
- A-7. Recognize pancreatic gastric and intestinal secretions and its regulatory mechanisms
- A-8. Discuss the GIT motility, secretions and physiology of digestion and absorption.
- A-9. Identify how to recognize and memorize liver functions and bile salts properly.

B- Intellectual skills

- B-1. Evaluate the basic science of physiology and assess clinical practice to explain the various phenomena of infectious diseases, tropical and gastrointestinal disorders
- B-2. Relate basics of GIT motility, secretions and physiology of digestion and absorption to pathogenesis of various gastrointestinal disorders
- B-3. Manage relevant and current data from literature, and clinical observations to help solve physiological clinical problems.

Course content:

Subjects	Lectures	Total Teaching Hours
Body temperature & it's regulation	2	2
Thermogenesis	1	1
Energy storage	2	2
Food intake	1	1
Shock	1	1
Splanchnic circulation	2	2
Capillary circulation	1	1
Acid base balance	2	2
Control of extra-cellular volume & osmolarity	2	2
Regulation of plasma K^+	1	1
Homeostasis, intake & output	2	2
Gastric secretion	2	2
Pancreatic secretion	2	2
Intestinal secretion	1	1
Motility of gastro-intestinal tract	2	2
Absorption of gastro-intestinal tract	2	2
Liver function & bile salts	2	2
Haemostasis	2	2
TOTAL	30	30 (2 credit hours)

(3) Teaching methods.

4.1. Lectures.

4.4. Problem-solving (case study) sessions

(4) Assessment methods.

5.1. Written exam, assessment of A1 to A9, and B1 and B2

Percentage of each Assessment to the total mark. (100)

Written exam: 80% (80)

MCQ: 20% (20)

Other assessment without marks.

–Log books

–Quiz.

(5) References of the course.

6.1. Hand books: Ganong's Review of Medical Physiology.

6.2. Text books: Guyton textbook of Human Physiology and Mechanisms of Disease.

6.3. Journals: Journal of Tropical Medicine and Hygiene, American journal of tropical medicine, Journal of Hepatology, Hepatology, Liver, Gut, Journal of digestive disease, Gastro-intestinal endoscopy, Journal of clinical microbiology, Journal of virology.

6.1. Websites: <http://www.asp.unl.edu>, <http://www.parasitology.org.uk>,
<http://www.dpd.cdc.gov/dpdx>, <http://www.phage.org/black09.htm>,
[http://www.microbe.org/microbes/virus or bacterium.asp](http://www.microbe.org/microbes/virusorbacterium.asp), <http://www.bact.wise.edu/bact330/330Lecturetopics>, <http://www.microbelibrary.org>,
<http://www.hepnet.com/hepb.htm>

(6) Facilities and resources mandatory for course completion:

1- lecture hall.

2- Teaching aid as computer, data show projector, laser pointer.

Course coordinator: Dr Mahmoud Abdel-Aziz

Assistant : Dr. Muhammad Diasty

Dr. WalaaShabana

Head of the department: Prof. Mahmoud El-Bendary