



COURSE SPECIFICATION

(Medical physiology)

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course.	Postgraduate degree of clinical pharmacology (MSc)
(2) Department offering the programme.	Clinical pharmacology department
(3) Department responsible for teaching the course.	Medical physiology department
(4) Part of the programme.	First part
(5) Date of approval by the Department's council	10/7/2016
(6) Date of last approval of programme specification by Faculty council	9-8-2016
(7) Course title.	Physiology
(8) Course code.	CPHARM 503
(9) CREDIT HOURS	1
(10) Total teaching hours.	15

(B) Professional information

(1) **Course Aims:**

The broad aims of the course are to:

Provide the candidate with a basic knowledge about the integration of physiological functions and the human body homeostasis for better understanding of pharmacology of drugs affecting different body systems

(2) Intended Learning Outcomes (ILOs):

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

A- Knowledge and Understanding

1. Describe regulation of acid-base balance.
2. Review interstitial fluid formation and patho-physiology of edema
3. Recognize different cardiac properties and respiration functions of blood.
4. List gastro-intestinal hormones and their physiological function
5. Identify motor function of the gastro-intestinal tract, its relevant abnormalities
6. Describe hypothalamus pituitary axis.
7. Describe Endocrinal function of the pancreas, thyroid, suprarenal and parathyroid glands.
8. Describe factors affecting insulin secretion and glucose transport in the body
9. Identify factors affecting glomerular filtration rate (GFR).
10. Study and explain regulation of arterial blood pressure, thermoregulation and pain control mechanisms.

B-Intellectual skills

- 1- Distinguish changes in different clinical and laboratory parameters including; blood pressure measurement , ECG recording , Pulmonary , liver and renal function tests in individuals
- 2- To predict diseases that alter the normal physiological clinical and laboratory results

(3) Course content.

Subjects	Lectures
1. Respiration functions of blood.	1
2. Regulation of blood PH-acid-base balance.	1
3. Cardiac properties.	1
4. Interstitial fluid formation and pathophysiology of edema.	1
5. Regulation of Arterial blood pressure.	1
6. Gastro-intestinal Hormones and their physiological function.	1
7. Motor function of the gastro-intestinal tract, its abnormalities.	1
8. Endocrinal function of the pancreas	1
9. Anatomical connection between hypothalamus and pituitary.	1
10. Hypothalamic-pituitary-adrenal axis	1
11. Endocrine function of the thyroid, suprarenal glands and parathyroid glands.	1
12. Glucose transport in the body and Factor affecting insulin secretion.	1
13. Measurement, factors affecting glomerular filtration rate (GFR).	1
14. Thermogenesis thermo regulation.	1
15. Pain control system.	1
Total teaching hours	15

(4) Teaching methods.

4.1: Lectures

(5) Assessment methods.

5.1: **written examinations** for assessment of knowledge & intellectual ILOs

5.2: - **MCQ exam** for assessment of knowledge & intellectual ILOs

Assessment schedule:

إجمالي	الدرجة			الاختبار	المقرر
	عملي	شفهي	تحريري		
٥٠		-	٤٠	إختبار تحريري مدته ساعة	المقرر الاختياري
			١٠	اختبار MCQ	

(6) References of the course:

6.1: Text books.

- Medical physiology department (student book)
- Guyton and Hall Textbook of Medical physiology
- Medical Physiology: Principles for Clinical Medicine

(7) Facilities and resources mandatory for course completion.

- Computer labs with open access to medical research databases
- Upgraded library
- Candidate's logbook.
- Internet with a wide range of learning support material.

Course coordinators:

- Prof. Dr. Hussein el beltagy.
- Prof. Dr. Ali Gaballa
- Prof. Dr. Mohamed-Hesham Daba
- Ass.Lecturer. Amira El Adl
- Ass.Lecturer. Rania al Qatary

Head of the department:

Prof. Dr. Hussein El Beltagy.