



COURSE SPECIFICATION

Applied Physiology

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme offering the course.	Master degree of Cardiovascular medicine	
(2) Department offering the programme.	Cardiovascular Medicine Department	
(3) Department responsible for teaching the course.	Physiology Department	
(4) Part of the programme.	First Part	
(5) Date of approval by the Department's council	24-5-2016	
(6) Date of last approval of programme specification by Faculty council	9-8-2016	
(7) Course title:	Applied Physiology	
(8) Course code:	CARD 503	
(9) Credit hours. (10) Total teaching hours.	0.5 credit hour 7.5	

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows: (either to be written in items or as a paragraph)

1- To provide knowledge &understanding of the scientific principle of the physiology of Cardiovascular system.

(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

- A1- Recognize the mechanism of circulation
- A2- Recognizes electrical activity of the heart
- A3- Recognizes Cardiac Properties
- A4- Explain the Cardiac cycle
- A5- Explain the basics of Electrocardiography
- A6- Explain the physiology of arterial blood pressure
- A7- Explain the mechanics of cardiac output
- A8- Explain cardiac work and mechanical efficiency
- A9- Explain different body parts circulation
- A10- Explain pathophysiology of edema, shock and hemorrhage

B- Intellectual skills

- B1-Diagnose cardiac arrhythmias diseases from electrocardiography
- **B2-Interpret arterial blood gases**
- **B3-Measure blood pressure properly**
- **B4-Differentiate different types of shock**

(3) Course content:

Subjects	Lectures
- Mechanism of circulation	4
- Electrical activity of the heart	
- Cardiac Properties	
- The Cardiac cycle	
- The basics of Electrocardiography	
- The physiology of arterial blood pressure	
- The mechanics of cardiac output	
- Cardiac work and mechanical efficiency	
- Different body parts circulation	1
- Pathophysiology of edema, shock and	1.5
hemorrhage	
- Anticoagulants	1
Total teaching hours	7.5

(4) Teaching methods.

- 4.1: lectures,
- 4.2: directed and self directed learning activities

(5) Assessment methods:

Assessment 1. Written exam. after 6 months of MSC registration

Assessment 2. Oral exam. after the written exam.

Assessment 3. MCQ

Assessment 4: Logbook

Percentage of each Assessment to the total mark.

MCQ: 18
Written exam: 72
Oral exam: 60
Total: 150

- (6) References of the course.
 - 6.1. Hand books:
 - 6.2. Text books

Cardiovascular Physiology

(7) Facilities and resources mandatory for course completion:

Teaching rooms and ECG learning in CCU

Course coordinator.

Prof Dr Eman ElSafty, Professor of cardiovascular medicine

Dr. Moheb Magdy, Lecturer of cardiovascular medicine

Head of the department: Prof. AbdelRazek Maaty

Date: 8-6-2016