



## COURSE SPECIFICATION

### (Basics of Cardiology)

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.	Cardiovascular Medicine 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.	Basics Of Cardiology
(8) Course code.	CARD 514 BC
(9) Credit hours.	1.5 credit hours
(10) Total teaching hours.	(22.5h)

## **(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 produce graduate able to acquire the competence and experience to effectively diagnose and manage patients with different Cardiovascular Diseases.**

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### **(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 diagnostic approach to different cardiovascular symptomatology

A2- Explain Indications, contraindications, techniques and complications of different cardiovascular diagnostic procedures

A3- Recognizes guidelines of using different diagnostic cardiovascular modalities

A4- Recognize different modalities of Electrocardiography, echocardiography, myocardial perfusion scanning, electrophysiology, invasive and non invasive cardiac imaging

A5-Recognize Indications, contraindications, techniques and complications of cardiac catheterization

A6- Explain anatomy and congenital anomalies of the heart, pericardium, great vessels and peripheral vessels and its applied

A7- Explain the principles of pericardiocentesis and direct current electrical cardioversion

A8- Explain the basic principles of echocardiography

A9- Explain the basic interpretation of cardiac x ray, CT, MRI

## B- Intellectual skills

**B1- Interpret Electrocardiography and stress ECG**

**B2- Select proper diagnostic cardiovascular modality in different cardiac disorder**

**B3 –Perform basic echocardiography, Pericardiocentesis and direct current cardioversion**

**B4 -Interpret Myocardial Perfusion Scanning**

**B5 –Interpret chest X ray, cardiac CT and MRI effectively**

### (3) Course content.

Subjects	Lectures	Total Teaching Hours
Embryology of heart and great vessels	1	1
Congenital anomalies of heart & GV	1	1
Anatomy of heart and great vessels	1	1
Systolic and Diastolic Time intervals.	1	1
Resting ECG	1	1
Exercise Stress testing	1	1
Holter Monitoring	1	1
Electrophysiologic studies	1	1
Electric cardio-version	1	1
Antitachycardia devices	1	1
Ambulatory Blood Pressure Monitoring	1	1
Cardiac imaging modalities (x-ray and CT).	1	1
Cardiac imaging modalities (MRI & Nuclear).	1	1
Transthoracic ECHO (Basic & Views)	1	1
Transthoracic ECHO (Clinical Applications)	1.5	1.5

Subjects	Lectures	Total Teaching Hours
Transesophageal ECHO and Stress ECHO	1	1
Echo Modalities and Tissue Doppler	1	1
Testing for viable myocardium	1	1
Cardiac heart catheterization (Right & Left)	1	1
Intra aortic balloon counter pulsation and Endo-myocardial biopsy	1	1
Percutaneous coronary intervention	1	1
Cardiac pacing	1	1
Total	22.5	22.5

**(4) Teaching methods:**

- 4.1: lectures, seminars, workshops
- 4.2: clinical sessions and work experience
- 4.3: Problem solving, case studies
- 4.4: directed and self directed learning activities

**(5) Assessment methods:**

Assessment schedule:

Assessment 1: Written exam

Assessment 2: Oral exam

Assessment 3: Logbook

Assessment 4: MCQ at the end of the semester

Percentage of each Assessment:

MCQ 36

Written exam. 144

Structured Oral exam. 120

Total. 300

**(6) References of the course.**

- 6.1. Hand books: Oxford handbook of cardiovascular medicine
- 6.2. Text books
  - Braunwald Heart Disease Text Book
  - Topol Manual of Cardiology
  - Hurst Heart diseases text book
- 6.3. Journals: Periodicals of American Journal of Cardiology  
Periodicals of European Heart Journal  
Periodicals of American Heart Journal
- 6.4. Websites: Update guidelines of Stress ECG, Echocardiography, Cardiac CT and MRI, Myocardial perfusion scanning, electrophysiology  
www.ESC.com, www.ACC.com,

**(7) Facilities and resources mandatory for course completion.**

Teaching rooms: Patients wards, CCU, Echocardiography and stress testing room, cardiac catheterization LAB.

**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