



# **COURSE SPECIFICATION**

# Cardiovascular Diseases

# Faculty of Medicine Mansoura University

# (A) Administrative information

(1) Programme offering the course.	Cardiovascular Department		
(2) Department offering the programme.	Cardiovascular Department		
(3) Department responsible for teaching the course:	Cardiovascular Department		
(4) Part of the programme:	Part I, Part II, MD thesis		
(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	Cardiovascular Diseases		
(8) Course code:	CARD 614		
(9) Credit hours	24 credit hours (360h), 15 clinical credit		
(10) Total teaching hours.	hours(450h)		

# (B) Professional information

## (1) Course Aims.

The broad aims of the course are as follows:

To provide the student with Basic and Updated Knowledge of patient management and different modes of diagnostic and Therapeutic Modalities of Cardiovascular diseases.

## (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- Discuss basic and updated knowledge of cardiovascular therapeutics
- A2- Understand basic and updated knowledge of cardiovascular pathology.
- A3- Discuss basic and updated Knowledge of Investigatory methods of cardiovascular medicne.
- A4 Discuss basic and updated Knowledge of patient management and different modes of diagnostic and therapeutic modalities of cardiovascular siseases .
- A5- Know the basics of designing a research project and training program in cardiovascular medicne.
- A8-Discuss how to apply clinical preventive strategies on cardiovascular medicine

#### B- Intellectual skills

- B1: Interpret the data gained from patient interrogation and clinical examination to reach a provisional diagnosis and differential diagnosis that facilitate selection of diagnostic procedures
- B 2: Interpret ECG with recognition of the normal pattern and abnormalities in different cardiovascular diseases
- B 3: Identify the normal response of stress ECG and the abnormalities in patient with coronary artery disease and some other cardiac problems
- B 4: Identify the abnormalities in 24 h Holter ECG monitoring and the diagnostic merits in cardiovascular disease
- B 5: Interpret the normal and abnormal non-invasive cardiac imaging including plain radiology, Echocardiography with its modalities, cardiac CT and CT angiography, radioisotope studies of the heart and MRI examination of the heart and blood vessels and their diagnostic value and limitations
- B 6: Interpret the data reported from different cardiac invasive diagnostic and therapeutic techniques including cardiac catheterization and electrophysiological studies and invasive monitoring like intra-arterial BP, CVP and PCWP
- B 7: How to analyze patient data and use information technology and transferable skills for presenting the case with other colleagues in a local or international conferences and the internet

#### C- Professional/practical skills

- C1-Perform the Standard Clinical General Body System Examination in the inpatients, outpatients as well as during emergency situation
- **C2-Proper Care of patent with acute Clinical Situations**
- **C3-Performing the Specific Local Cardiac Examination**
- C 4: Perform ECG recording and reporting (level II, III)\*
- C 5: Practice Stress ECG and reporting (level I, II, III)\*
- C 6: Perform 24 h Holter ECG monitoring and reporting (level I, II, III)
- C 7: Practice Echocardiographic examination with its different modalities; TTE (level I, II, III), TEE, stress ECHO and reporting (Level I, II)
- C 8: Perform external cardioversion and basic life support (level I, II, III)
- C 9: Insert temporary pacemaker (level I, II)
- C 10: Practice permanent pacemaker follow up and programming (level I, II)
- C 11: Assist and Practice cardiac catheterization of both right and left side, coronary angiography and percutaneous coronary intervention (level I, II)
- C12: Presenting Knowledge and clinical practice in local meeting and national and international conferences.
- \* Level I: Observation, Level II: Do under supervision, Level III: main operator

#### D- Communication & Transferable skills

- D 1: Communicate effectively with patients, families and public
- D 2: Communicate effectively with physicians, other health care professionals and health related agencies
- D 3: Work effectively as a member or leader of a health care team or other professional group
- D 4: Maintain comprehensive, timely and legible medical records
- D 5: Conduct a good training for the young colleagues, participate in CME program and perform self-appraisal.
- D 6: Conduct an effective lecture and presentation according to the known standards and time schedule.
- D 7: Share in design and participate effectively in research project that improve patient care and population health in our locality and allover Egypt

# (3) Course content Divided into Four Modules:-1-2-3-4

Subjects	Lectures/ Seminars	Clinical	Total Teaching Hours
Module 1	90	115	205
Heart Failure	25	30	55
Pericardium and Traumatic Ht Diseases	20	25	45
Diseases of Pulmonary Vascular Bed	20	30	50
Diseases of the Heart Muscles and Valves	25	30	55
Module 2	90	110	200
Arrhythmias, SCD, Syncope & Hypotension	45	55	100
Heart disease in Systemic Diseases and Miscellaneous	45	55	100
Module 3			
	90	115	205
Hypertension - Aortic and Arterial Diseases	30	35	65

Atherosclerosis	30	30	60
Heart disease in varied populations	15	25	40
Prevention of Cardiac Diseases and Cardiac rehabilitation	15	25	40
Module 4			
	90	110	200
Clinical Evaluation & Decision-Making	20	30	50
Non Invasive Investigations:	30	30	60
Invasive Investigations	20	30	50
Atherosclerotic Cardiovascular Diseases	20	20	40
Total Teaching Hours	360	450	810

## (4) Teaching methods.

4.1. lectures		
4.1: ICCIUICS	 	

- 4.2. seminars .....
- 4.3. grand rounds and case presentations.....
- 4.4. data interpretation meeting.....
- 4.5. Clinical Lab (Echo, Exercise, Catheter).....

# (5) Assessment methods:

- 5.1. Written. (for assessment of knowledge and inteletual skills)
- 5.2: MCQ. (for assessment of knowledge and inteletual skills)
- 5.3. Oral. (for assessment of knowledge, inteletual skills and Transferable skills)
- 5.4. Clinical. (for assessment of knowledge, Professional/practical Communication & Transferable skills)

### Assessment schedule:

- 1-Firist Exam: MCQ at end of Attendance of each Module (3) (Semesters) Course 2-Final Exam at end of course: at end the 4<sup>th</sup> Semesters (after Attendance of all Courses).
  - 2-a) Written exam
  - 2-b) Oral exam

- 2-c) Clinical exam
- 2-d) Viva exam 100 marks

### Percentage of each Assessment to the total mark.

- 1- MCQ Exam 60 marks
- 2-a) Written exam 240 marks
- 2-b) Oral exam 100 marks
- 2-c) Clinical exam 100 marks
- 2-d) Viva exam 100 marks

## (6) References of the course.

- 6.1. Hand books....Manual of Cardiovascular medicine, S. Marso, B.Griffen E. Topol eds.
- 6.2. Text books:
  - 1. Braunwald's Heart disease textbook of cardiovascular medicine
  - 2. Tobol' textbook of cardiovascular medicine
  - 3. Grossman' cardiac catheterization and intervention
  - 4. Feigenbaum textbook of Echocardiography
- 6.3. Journals.
  - 1. New England journal of medicine
  - 2. The Heart
  - 3. Circulation
  - 4. Journal of the American College of Cardiology
  - 5. American journal of cardiology
  - 6. European Journal of Cardiology
- 6.4. Websites.
  - 1. www.cardiosource.com
  - 2. www.medscape.com/cardiology
  - 3. www.escardio.org
  - 4. www.tctmed.com

# (7) Facilities and resources mandatory for course completion:

Lecture rooms

Outpatient clinic

Inpatient rooms and ICU

Echo lab

Exercise lab

Cath. lab

Course coordinator: Prof Dr Ahmed Wafa

Dr Moheb Magdy

Head of the department: Prof Dr AbdelRazek Maaty

Date: 8/6/2016