



## COURSE SPECIFICATION

**(Elective course)**

Faculty of Medicine- Mansoura University

### (A) Administrative information

(1) Programme offering the course.	MD degree of Radiology program
(2) Department offering the programme.	Radiology Dpt.
(3) Department responsible for teaching the course.	Radiology Dpt.
(4) Part of the programme.	Second part
(5) Date of approval by the Department's council	28/6/2016
(6) Date of last approval of programme specification by Faculty council	9/8/2016
(7) Course title.	Recent advances in cardiac imaging
(8) Course code.	RAD 629 ACI
(9) Total teaching hours.	45

## **(B) Professional information**

### **(1) Course Aims:**

The broad aim of the course is to provide the students with the different radiologic imaging modalities used for vascular system examination, as well as the recent technical innovations and their application in the differential diagnosis of various diseases and their radiologic appearance.

### **(2) Intended Learning Outcomes (ILOs):**

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

#### **A) Knowledge and Understanding**

**A1. Describe the basic physics of the recent imaging modalities used in cardiac examination.**

**A2. Identify the recent technical innovations in different imaging modalities and learn how to apply them to reach a final diagnosis.**

**A4. Classify and describe the etiology, pathogenesis and clinical features of the cardiac diseases and correlate them with their radiologic appearances on the imaging modalities within the scope of study.**

**A5. Differentiate between the appearances of the pathological conditions on the different imaging modalities and describe them efficiently in the case reports by all means: written oral and radiologic.**

**A6. Radiologic approach to cardiac emergency and life threatening illnesses, non invasive and invasive intervention and pre and postoperative follow up.**

#### **B- Intellectual skills**

**B1. Integrate basic physical, technical and radiological principles with clinical history and data offered by the referring clinician to gather a full picture of the case available.**

**B3. Use personal judgment for critical and analytical problem solving and seek out information.**

**B4. Recognize and cope with uncertainty that is unavoidable in medical practice by accepting and reacting with uncertain situation through proper counseling, consultation and referral.**

**B5. Assemble advanced imaging modalities, scientific methods, regular conference attendance and computer & internet for research purposes.**

### **C-Professional/practical skills**

**C5. Develop communication skills with colleagues, various health and social care professionals.**

### **D- Communication & Transferable skills**

**D1. Use the different computer programs in the different units of the diagnostic radiology department and communicate efficiently with medical staff of other departments.**

**D2. Retrieve, manage and manipulate information by all means, including electronic means to regularly updated with the recent technical innovations.**

**D3. Present information clearly in the form of written radiology reports, electronic and oral forms.**

**D4. Attend interactive case study sessions and express ideas and effective arguments about debatable cases.**

**D5. Work efficiently within a team work to reach the goal of a research.**

**D6. Analyze and use numerical data (including the use of simple statistical methods) to assess the results of a number of case studies and assess the efficiency of a certain imaging modality in the radiologic characterization of a certain organ disease.**

### 3) Course content:

Subjects	Lectures	Clinical	Total Teaching Hours
- CT coronary Angiography	5	7.5	
- cardiac MRI	5	7.5	
- Cardiomyopathy	5		
	15	30	Total time = 45 Hrs.

### 4) Teaching methods:

4.1. Lectures

4.2: Meetings

4.3: Case presentations

4.4. Video demonstrations

### 5) Assessment methods:

**5.1: Written examination for assessment of ILOs number A1, A2, A4,A5,A6**

**5.2: Oral examination -----**

**5.3: Practical examination -----**

**5.4: Log book for activities for assessment of:** mainly for assessment of practical & transferable skills which are accepted through attending different conferences, thesis discussions, seminars, workshops, attending scientific lectures as well as self learning.

**5.5: The supervisor requires certain assignments:** meetings and case presentations that are evaluated and signed by the supervisors in the log book (without marks).

**5.6: Meetings:** the candidate should prepare and present at least one seminar in a topic related to the course and determined by the supervisors in front of the department staff (without marks).

**Assessment schedule:**

Written exam. After the candidate finishes all semesters

Percentage of each Assessment to the total mark, 100%

Written exam: 30

Clinical exam:

Oral exam:

MCQ:

Other types of assessment: ----

Other assessment without marks: log book

## 6) References of the course:

6.1: Hand books:

6.2: Text books: - Textbook of Radiology and Imaging, David Sutton.  
Diagnostic imaging

6.3: Journals: [www.Radiographics.com](http://www.Radiographics.com)  
[www.radiology.com](http://www.radiology.com)

6.4: Websites:

6.5: Others:

## 7) Facilities and resources mandatory for course completion.

- Lecture rooms: available in the department
- Facilities for image analysis
- Computers for data analysis
- Data show facilities
- Video demonstrators

Course coordinator:

Dr. Eman Abd El Salam

Dr. Nehal ElBatooty

Head of the department: Prof. Mahmoud Abd Elshaheed

Date: