COURSE SPECIFICATION

(Breast imaging)

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course:	Msc 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:	Breast imaging
(8) Course code:	RAD 529 Tj
(9) Credit hours	
(10) Total teaching hours:	22.5

(B) Professional information

(1) Course Aims:

The broad aim of the course is to provide the students with the basic principles of different radiologic imaging modalities used for Breast imaging, differential diagnosis of various pathological 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

A3. Demonstrate and express the radiologic appearance of different pathological diseases that affect the breast.

A4. Recognize the Differential diagnosis between the various pathological conditions on the different imaging modalities.

A8. Identify the role of radiology in public health services and screening programs e.g. mammography for breast cancer screening

A12. Be aware of and recognize the national code of ethics, medico-legal aspects, malpractice and common medical mistakes.

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.

B2. Reason deductively in solving clinical problems:

a. Pick up the abnormality in the film
b. Interpret the available data into a full radiologic report
c. Analyze and evaluate the results to exclude or suggest the necessity of further evaluation.
d. Decide the final diagnosis or differential diagnosis of the case.
e. Discriminate between technical errors, normal anatomical variants and pathology.
f. Suggest the imaging modality of choice best for evaluating the specific organ of interest.

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

C1. Apply the technical refinements in each imaging modality: sonography, mammography, breast MRI in order to establish the diagnosis with the highest accuracy and in the shortest time.

C3. Provide the maximum protective measures to avoid the risks of radiation on the patients, workers and visitors.

C6. Recognize limitations in knowledge and equipment and refer patients to an appropriately equipped facility.

C7. Perform the essential basic radiologic interventional procedures e.g mammography wire/US guided biopsies

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
• Bg vs Mg	1.25	2.5	
• Lactating breast	1.25	2.5	
• Male breast	1.25	2.5	
• LN	1.25	2.5	
• Calcification	1.25	2.5	.
• Breast implant	1.25	2.5	
	7.5	15	Total time = 22.5 Hrs

4) Teaching methods:

4.1. Lectures

4.2: Meetings

4.3: Case presentations

5) Assessment methods:

5.1: Written examination for assessment of ILOs number A3, A4

5.2: Oral examination for assessment of ILOs number A3, A4, B2

5.3: Practical examination for assessment of ILOs number B1, B3,D3

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

Clinical exam after the candidate finishes all semesters

Oral exam after the date candidate finishes all semesters

MCQ 15 weeks after the start of the semester

This course is a part of Radiodiagnosis course:

Percentage of each Assessment to the total mark:

Written exam:	300 Marks	46.9 %
Clinical exam:	150 Marks	23.4%
Oral exam:	150 Marks	23.4%
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.

6.3: Journals: www.Radiographics.com

www.radiology.com

6.4: Websites: www.sonoworld.com

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:

D. Eman Abd El Salam

D. Nehal ElBatooty

Head of the department: Prof. Dr/ Mahmoud Abd Elshaheed Date: