COURSE SPECIFICATION
Radiology & nuclear medicine
Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme offering the course:	Postgraduate program of endocrinology, diabetes, clinical nutrition and metabolism (EDCNM600)
(2) Department offering the programme:	Internal medicine (endocrinology and diabetes unit)
(3) Department responsible for teaching the course:	Internal medicine department (endocrinology and diabetes unit) Diagnositic radiology department Radiotherapy department
(4) Part of the programme:	Elective course , Second part (6^{th} semester)
(5) Date of approval by the Department`s council	12/7 / 2016
(6) Date of last approval of programme specification by Faculty council	9/8 /2016
(7) Course title:	Radiology & nuclear medicine
(8) Course code:	EDCNM610RN
(9) Credit hours	2 hours
(10) Total teaching hours:	30 hours

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

- Provide the candidates with knowledge about the role of imaging and interpretation of different imaging techniques in the diagnosis and management of endocrine disease.
- Assist the candidates to develop the ability to use the radioactive isotope basics in diagnosis and therapy of endocrine diseases

(2) Intended Learning Outcomes (ILOs):

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

A- Knowledge and Understanding

A1 Identify different imaging modalities in the investigation and management of a wide spectrum of endocrine disorders
A2 Recognize the role and limitations of each imaging modality
A3 Identify the role of radioisotopes to diagnose and treat different endocrinal disorders
A4 Recognize safety procedures in use of radioactive isotope in diagnosis and treatment of endocrine disorders

B- Intellectual skills:

B1 Practice safety procedures in use of radioactive isotope
B2 Select proper radiological technique diagnosis of different endocrine disorders

(3) Course content:

The course fulfils 2 credit hour through fourth semester including the following topics:

Subjects	Lectures	Seminars	Practical
1. Basics of use and safety of radio-isotopes	**2**	**2**	
1. Radioisotopes in diagnosis and treatment of thyroid disorders	**2**	**1**	
2. Thyroid US & guide for fine needle aspiration biopsy.	**1**	**2**	
3. MRI orbit for thyroid eye disease.	**1**		
4. Imaging of metabolic bone diseases X ray skull and bone for metabolic bone diseases. DEXA scan at multiple skeletal sites to diagnose osteoporosis	**3**	**2**	
5. Imaging of pituitary & hypothalamic disorders. Brain CT scans Brain MR	**2**	**2**	
6. Imaging techniques in detection of bone infection in the diabetic foot	**2**	**1**	
7. Imaging of suprarenal Use of radioisotope scans for adrenals(metaiodobenzylguanine)	**3**	**2**	

Abdominal CT& MRI of adrenal for tumors and hyperplesia			
8. Role of gonadal ultrasonography in puberty disorders	**1**		

(4) Teaching methods:

4.1: Lectures with power point presentations and discussions.
4.3: Problem solving case scenarios .
4.4:Seminars and presentation of solved case scenarios by the postgraduate students.
4.5. Workshops for searching skills and critical appraisal skills.

(5) Assessment methods:

I. Continous assessment after completion of the course:
MCQ exam at the end of the course (5 marks)

II. Final exam :
Assessment 1: Written exam (short essay questions and case scenarios) (20 marks)
Assessment 2: an oral exam (25marks)

Other assessment without marks:
Log book for assessment of the attendance and activities throughout the course.

(6) References of the course:

6a. Reference Books

1. Williams textbook of endocrinology
2. Textbook of Radiology and Medical Imaging. David Satton

6b. Periodicals and Web Sites

American Journal of radiology,

New England journal of medicine

Diabetes care,

Journal of clinical endocrinology and metabolism,

http/www. biomedcentral. Com.,

www.Medscape.com ,

www.uptodate.com.

(7) Facilities and resources mandatory for course completion:

- Lecture rooms: available in the department
- library
- Computer laboratories with a wide range of software
- Intranet with a wide range of learning support material

Course coordinator:
Professor /Amany Mousa
Professor/ Manal Tarshoby
Head of endocrinology unit: Prof Nagy Shaaban -

Head of the internal medicine department: Professor Salah Elgamal

Date: / 2016