



**A- COURSE TITLE, CODE, ACADEMIC YEAR:**

**CLINICAL PRACTICE 4 (RAD-472) 1437-1438H**

**B- COURSE INFORMATION:**

Course Code	Course Title	Credit Units			Study Level	Pre-requisites
		Total	Theory	Practical		
RAD-472	Clinical Practice 4	4	-	-	8 <sup>th</sup>	RAD-471
Course Coordinator		Extension		Email Address		
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**C- COURSE DESCRIPTION:**

This course is a continuation of RAD 471. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis, and evaluation of concepts and theories in the performance of radiologic procedures. Content includes patient assessment, Ultrasound, Magnetic resonance, Nuclear Medicine, radiologic imaging critique; concepts of team practice and patient-centered clinical practice. The course will be scheduled in block time form; 2 day/week (6 hrs/day) for 15 weeks.

**D- COURSE OBJECTIVES:**

1. Identify and understand the pre-clinical preparation requirement.
2. Demonstrate knowledge of basic patient care and nursing.
3. Demonstrate a sound knowledge of basic clerical work and image handling.
4. Identify and demonstrate understanding of the safe use of controls and accessory equipment utilized on the diagnostic imaging equipment.
5. Understand and demonstrate basic patients` reception and communication.
6. Demonstrate a sound knowledge of surface and sectional anatomy.
7. Outline the steps involved in the pre-diagnostic imaging procedures.
- 8- Demonstrate and practice basic ultrasound, nuclear medicine magnetic resonance and elective procedures under supervision

**F- PRACTICAL SESSIONS:**

Week	Practical Session	Contact Hours
1	<b>Pre-Clinical Preparation:</b> 1. Codes of Conduct.	12



	Introduction to clinical documentation	
2	<p><b>Nuclear Medicine</b></p> <ol style="list-style-type: none"> <li>Standard positioning and departmental protocols for a range of planar and cross-sectional imaging.</li> <li>Use of different isotopes and radiopharmaceuticals for imaging</li> <li>Image processing and manipulation</li> <li>Identify normal, normal-variant planar and cross-sectional anatomy, physiology and pathology.</li> </ol> <p>Safe and efficient working, with particular attention to radiation protection, patient care and communication.</p>	24
3	<p><b>Ultrasound Imaging</b></p> <ol style="list-style-type: none"> <li>Standard departmental protocols scanning protocols and techniques for obstetric and non-obstetric ultrasound.</li> <li>Use of ultrasound equipment to perform measurements of anatomy and pathologies</li> <li>Identify normal, normal-variant anatomy and pathology.</li> </ol> <p>Safe and efficient working, with particular attention to patient care and communication.</p>	48
4	<p><b>Magnetic Resonance Imaging</b></p> <ol style="list-style-type: none"> <li>Standard positioning and departmental protocols.</li> <li>Use of contrast media</li> <li>Image processing and manipulation</li> <li>Identify normal, normal-variant cross-sectional anatomy and pathology.</li> <li>Particular attention to the safety issues associated with the use of strong magnetic fields for imaging</li> </ol> <p>Safe and efficient working, with particular attention to patient care and communication.</p>	48
5	<b>Elective Imaging</b>	48

#### G- ASSESSMENT TASKS:

#	Type of assessment task	Week	Total Grades
1	Case study (A)	4-6	10%
2	Case study(B)	10-12	10%
3	OSCE	9	15%
4	Log book	14	5%
5	Mid-term exam	15	20%
6	Final practical exam	16	40%

#### H- LEARNING RESOURCES:

Required textbook:

- Maurizio E, Amedeo M. (2012, or last edition). Medical Imaging: Procedures, Techniques & Applications. Publisher: Science Publishers Inc. ISBN-10: 1620810492, ISBN-13: 978-1620810491.



- Catherine Westbrook, Carolyn Kaput Roth & John Talbot. (2005 or last edition). MRI in practice. 3<sup>rd</sup> edition, Wiley- Blackwell

2- Essential references:

- Matthias Hofer, (2010, or last edition). Ultrasound Teaching Manual. 2nd edition. Publisher: Non Basic Stock Line; ISBN-10: 3131110422. ISBN-13: 978-3131110428