



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

**Nuclear Medicine 2 (RAD-354) 1437-1438**

**B- COURSE INFORMATION:**

Course Code	Course Title	Credit Units			Study Level	Pre-requisites
		Total	Theory	Practical		
RAD 354	Nuclear Medicine (2)	3	2	1	6 <sup>th</sup>	RAD 353
Course Coordinator/ Instructor		Extension		Email Address		
Dr. Suliman Salih		3619		ssalim@taibahu.edu.sa		

**C- COURSE DESCRIPTION:**

This course covers diagnostic procedures, including anatomy and physiology, pathophysiology, and protocols for routine and non-routine nuclear medicine procedures, beside non imaging diagnostic and therapeutic procedures. Clinical experience must be acquired to enhance the didactic learning of all commonly performed diagnostic procedures.

**D- COURSE OBJECTIVES:**

1. Describe the pathology and pathophysiology associated with each organ system.
2. Recognize and explain clinical indications for diagnostic procedures.
3. Describe and apply the appropriate diagnostic protocols.
4. Evaluate images and quantitative data for technical quality, including
5. artifacts and normal variants.

**E- THEORY TOPICS:**

Week	Theory Topic	Contact Hours
1	Non- imaging: Hematology and Radio assay	2
2	Imaging Procedures:	2
3	Musculoskeletal system.	4
4	Diagnostic Procedures: Cardiovascular system.	4
5	Diagnostic Procedures: Endocrine system.	4
6	Diagnostic Procedures: Respiratory system.	4
7	Diagnostic Procedures: Digestive system.	2
8	Diagnostic Procedures: Urinary system.	2
9	Diagnostic Procedures: Central nervous system.	2
10	Diagnostic Procedures: Lymphatic system.	2



11	Revision	2
12	Total	30

F- PRACTICAL SESSIONS:		
Week	Practical Session	Contact Hours
1	Non- imaging: Hematology and Radio assay	2
2	Imaging Procedures:	2
3	Musculoskeletal system.	4
4	Diagnostic Procedures: Cardiovascular system.	4
5	Diagnostic Procedures: Endocrine system.	4
6	Diagnostic Procedures: Respiratory system.	4
7	Diagnostic Procedures: Digestive system.	2
8	Diagnostic Procedures: Urinary system.	2
9	Diagnostic Procedures: Central nervous system.	2
10	Diagnostic Procedures: Lymphatic system.	2
11	Revision	2
12	Total	30

G- ASSESSMENT TASKS:			
#	Type of assessment task	Week	Total Grades
1	Assignments( quizzes, seminars, homework, etc.)	Over tge course period	10%
2	Written Test (1)	8	20%
3	Written Test (2)	13	20%
4	Final Exam (practical)	14	100%
5	Final Exam (theoretical)	16	40%
	Total		100%

H- LEARNING RESOURCES:
<p><u>1- Required textbook:</u></p> <ul style="list-style-type: none"> <li>Paul E. Christian, Kristen M. Waterstram-Rich(2012). Nuclear medicine and PET/CT: technology and techniques. 4th edition. Mosby.ISBN-10:032304395X.</li> </ul> <p><u>2- Essential references:</u></p>



- Sharp P.F., Gemmell H.G. and Murray A.D. (2010, or last edition). Practical Nuclear Medicine (3rd edition), Springer, ISBN 1-852-33875-X (UL: 616.07575 PRA)
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**Notes:**

- Assignments topics and requirements shall be announced by the end of Week-1, the deadline for submission is 12pm Thursday of Week-10 (each semester).
- Assignments and written assessment tasks must be verified against plagiarism, the maximum acceptable percentage is determined by the department (according to each level).
- Continuous assessments may include quizzes, internet searches, home-works, exercises, class activity, scratch cards, presentations, group work, etc.
- Practical exams may contain hands-on experiments, laboratory work, simulations, or demonstrations.
- Written exams will include multiple-choice questions (MCQ), short essay questions, and long essay questions.