Kingdom of Saudi Arabia
Taibah University – Madinah
College of Applied Medical Sciences
Department of Diagnostic Radiology

COMPUTED TOMOGRAPHY 2 (RAD-352) 1437-1438H

A- COURSE INFORMATION:

Course Code	Course Title	Credit Units			Study Level	Pre-requisites
		Total	Theory	Practical		
RAD 352	Computed Tomography (2)	2	1	1	6th	RAD 351

Course Coordinator/ Instructor	Extension	Email Address
Dr. Moawia Bushra Gameraddin		mgameraddin@taibahu.edu.sa

B- COURSE DESCRIPTION:

This course is design to provide to the student with basic clinical and technical skills in application of computed tomographic imaging, including the basic technique of CT scan of The head, thoracic and abdomen.

C- COURSE OBJECTIVES:

1. To apply protocol for CT examinations.
2. To appraise the imaging technique for each organ/ region to match the criteria for diagnostic image .
3. To identify the artifacts on the CT image, find out cause and suggest modification in technique to eliminate it.
4. To identify the normal anatomy and pathological lesion on the CT image.
5. To perform CT procedures under supervision and guidance of qualified CT specialist.

D- THEORY TOPICS:

Week	Theory Topic	Hours
1	General orientation in CT department	1
2	Protocol for CT examinations general practice	1
3	Protocol and imaging technique of Trans axial Head CT	1
4	Protocol and imaging technique—CT Orbits, Trans axial	1
5	Protocol and imaging technique of CT Temporal bone (middle and inner ear), Trans axial	1
6	Protocols and imaging techniques of Trans axial CT for chest.	2
7	Protocols and imaging techniques of CT Abdomen, Trans axial	2
8	Protocols and imaging techniques of CT Pelvis, Trans axial	1
9	Protocols and imaging techniques of CT Spine, Trans axial	2
10	Modification of technique in clinical condition that affects image quality and image evaluation	3

E- PRACTICAL SESSIONS:

Week	Practical Session	Hours
1	General orientation in CT department	2
2	Protocol for CT examinations general practice	2
3	Protocol and imaging technique of Trans axial Head CT	4
4	Protocol and imaging technique—CT Orbits, Trans axial	2
5	Protocol and imaging technique of CT Temporal bone (middle and inner ear), Trans axial	4
6	Protocols and imaging techniques of Trans axial CT for chest.	4
7	Protocols and imaging techniques of CT Abdomen, Trans axial	4
8	Protocols and imaging techniques of CT Pelvis, Trans axial	4
9	Protocols and imaging techniques of CT Spine, Trans axial	2
10	Modification of technique in clinical condition that affects image quality and image evaluation	2

F- ASSESSMENT TASKS:

#	Type of assessment task	Week	Total Grades
1	Assignments (quizzes, seminars, ect….	Over the course period	10%
2	Written Test (1)	8	20%
3	Written Test (2)	13	20%
4	Final Exam (practical)	14	10%
5	Final Exam (theoretical)	16	40%
	Total	15	100%

G- LEARNING RESOURCES:

1- Required textbook:

- Paul M. Silverman (2011, or last edition). Multislice Computed Tomography: Principles, Practice, and Clinical Protocols. Lippincott Williams & Wilkins; Second Edition.

2- Essential references:

- Matthias Hofer (2007). CT Teaching Manual. 3rd edition, Georg Thieme Verlag. Updated 2017.
- Karthikeyan, Deepa Chegu (2006). Step by step CT scan,2nd edition. Anshan publishing

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 assessment methods 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.