The Hashemite University
Faculty of Allied Health Sciences
Department of Medical Imaging
Course Syllabus

Course information	
Course Title	Computed Tomography (1)
Course Code	140508331
Prerequisites	140508221
Credit Hours	3

Course Description

This course introduces the students to the basic principles of computed tomography (CT), including the physics and instrumentation related to CT. CT image quality and patient dose are also covered in this course.

Course Objectives

By the end of this course, student is expected to:

Be able to understand the physical principles and major hardware components of the CT scanner.
Be able to describe the process of data acquisition.
Be able to understand the process of image formation.
Be aware of radiation doses and protection techniques.

Recommended Textbook	
Title	Computed Tomography, Physical Principles, Clinical Applications, and Quality Control
Author	E. Seeram
Publisher	Saunders Elsevier
Year	2009
Edition	Third

Course Contents

- Part (I): Introduction to Hardware and Physical Principles of Computed Tomography
- Part (II): Spiral/Helical Computed Tomography
- Part (III): Image Manipulation and Three Dimensional CT
- Part(IV): CT Image Quality and Radiation Dose

Assessment	
First Exam	25%
Second Exam	25%
In course assessment	10%
Final Exam	40%