Course Syllabus

Course title:	Principles of Diagnostic Imaging	**Course No:**	1201331
Course level:	Third year	**Course prerequisite (s) and/or co-requisite (s):**	1201103-1201208-1201210 /Obligatory
Lecture time:	T/W (20:00-21:30)	**Credit hours:**	3 Hours

Academic Staff Specifics

Name	Rank	Location	Email address
Prof.Dr. Samah Hosney Nagib	Professor	Physical Therapy Department	Samahnagib@ymail.com

Course Description

This course will introduce the basic information about X ray used for diagnosis and assessments of different ailment. It will inform students about the diagnostic X ray. Also it will help students to explore methods and types of x ray like US and CTS and MRI to understand the x ray findings

Course Objectives

This course aims to provide the students with basic principles of how to read and interpret the findings of different types of radio diagnostic tests. Also, provide the students with a professional physical therapist graduation with particular skills in evaluating different radiological finding

Learning Outcome

Knowledge and understanding, by the end of this course, students should be able to:

1-Describe clinical reasoning approaches in the selection, justification and review of appropriate treatment

2-Select methods of gathering and recording information from a wide range of sources which form basis of physical therapy assessment.

3-Collect pertinent information for a given patient through reviewing the provided medical documents.

4-Participate effectively as a member of a team and participate constructively in groups

Cognitive skills (thinking and analysis):

Interactive learning by participating the student into the lectures content.

Communication skills (personal and academic):

Review concept at office hours

Practical and subject specific skills (Transferable Skills):

Doing homework and simple reports.

Course Outline and Time schedule

Week	Course Outline
First week	Introduction to Radiography
2nd week	Basics of orthopedic radiology
3rd week	Vertebral column x-ray
4th week	Chest x-ray
5th week	Uses of C.T. as an imaging modality
6th week	MRI in musculoskeletal diagnosis
7th week	MRI in neurological disorders
8th week	Ultrasonography
9th week	Mammography and breast imaging examination
10th week	Special imaging Modalities
11th week	Advanced Imaging Modalities

Presentation methods and techniques

Methods of teaching varied according to the type of text, student and situation. The following techniques are usually used:

- Interactive Live **Online** Lectures
- Cooperative learning.
- Discussion.
- Learning by activities.
- Connecting students with different sources of information

Sources of information and Instructional Aids

- Computer … power point …etc.
- Transparencies
- Distance learning
- Library sources

Assessment Strategy and its tools

The assigned syllabus is assessed and evaluated through: feedback and the skills that are acquired by the students

The tools:

1- Diagnostic tests to identify the student's level and areas of weakness
2- Formal (stage) evaluation
a) Mid-term exam
b) Class Participation
c) Activity file
d) Final exam

Tool & Evaluation

The following table clarifies the organization of the assessment schedule:

Test	Grade
Mid-term Exam	25
Activities & Participation	25
Final Exam	50
Total	100

Activities and Instructional Assignment

Practical assignments to achieve the syllabus objectives.

Regulations to maintain the teaching-Learning Process in the Lecture:

1- Regular attendance online live lectures.
2- Respect of commencement and ending of the lecture time.
3- Positive relationship between student and teacher.
4- Commitment to present assignments on time.
5- High commitment during the lecture to avoid any kind of disturbance and distortion.
6- High sense of trust and sincerity when referring to any piece of information and to mention the source.
7- The student who absents himself should submit an accepted excuse.
8- University relevant regulations should be applied in case the student's behavior is not accepted.
9- Allowed Absence percentages are (not exceed 15 %.).

References

- Chest X-Ray Made Easy IE, 4th Edition., 2016
- Murphy A, Neep M (April 2018). "An investigation into the use of radiographer abnormality detection systems by Queensland public hospitals". Journal of Medical Radiation Sciences.
- Harjit Singh.Janet A. Neutze. Radiology Fundamentals., 4th Ed.,2012.