



## COURSE PLAN

### FIRST: BASIC INFORMATION

College					
College	Faculty of Medicine				
Department	Medicine Department/ Diagnostic radiology				
Course					
Course Title	Diagnostic radiology				
Course Code	31512593				
Credit Hours	3				
Prerequisite	N/A				
Instructor					
Name	Dr Wala Bani Hamad Dr Reem Hasweh				
Office No.	Floor: B1 Office number: 03				
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E-mail	walamatar@bau.edu.jo Reem.hasweh@bau.edu.jo				
Office Hours	8:00am-4:00pm				
Class Times	Building	Day	Start Time	End Time	Room No.
	Faculty of Medicine	Sunday	9:00am	3:00pm	103
	Faculty of Medicine	Monday	9:00am	3:00pm	103

### Text Book

- |       |  |
|-------|--|
| Title | <ul style="list-style-type: none"> <li>Anatomy of Diagnostic imaging, 3<sup>rd</sup> edition</li> <li>Grainger &amp; Allison's Diagnostic Radiology. 6<sup>TH</sup> edition</li> <li>Imaging atlas of human anatomy, 4<sup>th</sup> edition</li> </ul> |
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### SECOND: PROFESSIONAL INFORMATION

#### COURSE DESCRIPTION

The two-week diagnostic imaging course provides fifth year medical students with a broad exposure to different medical images, including conventional radiography, fluoroscopy, computed tomography, magnetic resonance imaging, and ultrasound. The radiology rotation gives the students skills and knowledge to know the radiological anatomy and to diagnose diseases by interpreting radiological images.

#### COURSE OBJECTIVES

- Understanding the basic science of radiation, radiation protection, and hazards of radiation.
- Knowing the principles and physics of different imaging modalities, like conventional



- radiography, ultrasound, fluoroscopy computed tomography and magnetic resonance imaging.
- Gain the ability to read images of unstable and stable patients in the emergency department, clinics, and inpatients departments
  - Recognize complications and allergic interactions of contrast media and precautions for its use.
  - Cover main and common conditions in Radiology.
  - Gain the ability to correlate between clinical scenario of the patient and the requested radiological examination beside the interpretation of the radiological study.
  - Gain the ability to diagnose medical and surgical emergencies in brain, spine, chest, abdomen, and bones.
  - Fluoroscopy and mammography are covered at MOH and royal medical services

**COURSE LEARNING OUTCOMES**

- 1) Knowledge and Understanding
  - To know the anatomy of different body parts
  - Knowledge about major diseases
  - Understand the advantages and disadvantages of different imaging modalities
  
- 2) Professional Skills
  - To be able to read chest and abdomen images
  - To be able to read head and neck images
  - To be able to read musculoskeletal images
  - To be able to diagnose disease through imaging
  
- 3) Competences (Transferable skill and attributes)
  - To be able to communicate with other clinicians
  - To be able to use ultrasound machines

**COURSE SYLLABUS**

Course Topic	Notes
Radiology overview	<ul style="list-style-type: none"> <li>• Introduction to radiology</li> <li>• Definition of medical radiation</li> <li>• Medical radiation techniques</li> <li>• Radiation safety</li> <li>• Radiological archiving</li> <li>• Advantages and disadvantages of medical radiation</li> </ul>



Imaging of abdomen	<ul style="list-style-type: none"> <li>• Introduction to anatomy</li> <li>• Abdominal gas</li> <li>• Inflammation of the gallbladder</li> <li>• Pancreatitis</li> <li>• Appendicitis</li> <li>• Abdominal calcifications</li> <li>• Urinary tract stones</li> <li>• Uterine and prostatic diseases</li> <li>• Peritoneal fluid</li> <li>• GIT tumors</li> <li>• Hernias</li> <li>• Esophageal disorders</li> </ul>
Imaging of chest	<ul style="list-style-type: none"> <li>• Introduction to chest anatomy</li> <li>• Consolidation</li> <li>• Pneumothorax</li> <li>• Collapse</li> <li>• Heart failure</li> <li>• Lung cancer</li> <li>• Mediastinum</li> </ul>
Imaging of head and neck	<ul style="list-style-type: none"> <li>• Radiology overview</li> <li>• Anatomy</li> <li>• Hydrocephalus</li> <li>• Hemorrhage</li> <li>• Brain Calcifications</li> <li>• Cerebral sinuses thrombosis</li> <li>• Ischemia</li> <li>• Neoplasms</li> <li>• Skull Vault fractures</li> <li>• Spine related disease</li> </ul>
Musculoskeletal imaging	<ul style="list-style-type: none"> <li>• Radiological overview</li> <li>• Anatomy</li> <li>• Fractures</li> <li>• Arthritis</li> <li>• Bone lesions</li> <li>• Non accidental trauma</li> </ul>

#### COURSE LEARNING RESOURCES

Teaching is through lectures, Tutorials and quizzes performed, as well as during rotations in radiology departments in hospitals of ministry of health and royal medical services.

#### ONLINE RESOURCES

<https://radiopaedia.org/>  
<https://www.imaios.com/en/e-Anatomy>  
<http://w-radiology.com/>  
<https://www.statdx.com/>  
<https://www.radiologycafe.com/>



<http://www.headneckbrainspine.com/>

### ASSESSMENT TOOLS

(Write assessment tools that will be used to test students ability to understand the course material and gain the skills and competencies stated in learning outcomes)

ASSESSMENT TOOLS	%
Attendance	5
Participation	5
Quizzes	5
Mid Exam	35
Final Exam	50
<b>TOTAL MARKS</b>	<b>100</b>

### THIRD: COURSE RULES

#### ATTENDANCE RULES

Attendance and participation are extremely important, and the usual University rules will apply. Attendance will be recorded for each class. Absence of 10% will result in a first written warning. Absence of 15% of the course will result in a second warning. Absence of 20% or more will result in forfeiting the course and the student will not be permitted to attend the final examination. Should a student encounter any special circumstances (i.e. medical or personal), he/she is encouraged to discuss this with the instructor and written proof will be required to delete any absences from his/her attendance records.

#### GRADING SYSTEM

Example:

90 – 100	A
85 – 89	B+
75 – 84	B
65 – 74	C+
60 – 64	C
55 – 59	D+
50 – 54	D
45-49	D-
Less than 45	F

#### REMARKS

The student must adhere to the ethics of the medical profession, both throughout the lectures and during rotation in the radiology departments in the teaching hospitals with either teachers or patients.



**COURSE COORDINATOR**

**Course Coordinators: Dr. Wala Bani Hamad, Dr Reem Hasweh**

**Head of department: Dr. Lama Muhesin**

**Dean of faculty of medicine: Dr. Nidal Younes**

**Date: 2/7/2020**