## **Course Specification Card for Radiology**

| College               | College of Medicine  | Department           | Medical Education |           |     |  |
|-----------------------|--|----------------------|-------------------|-----------|-----|--|
| Course Name (English) | Radiology  | Course Name (Arabic) | الأشعة            |           |     |  |
| Course Number         | 1000509  | Course Code          | 1000509           |           |     |  |
| Credit Hrs.           | 1.5  | Contact Hrs.         | Theoretical       | Practical | T   |  |
| Teaching Language     | English 🔀 Arabic 🗌   |                      | 8                 | 28        | 36  |  |
| Teaching Method       | Face-to-Face   | Online               |                   | Blend     | ded |  |
| Course Nature         | Comp   | Elective             |                   |           |     |  |
| Course Type           | University Requirement College Requirement Program Require |                      |                   |           |     |  |
| Level                 | 5 <sup>th</sup> Year                                       | Pre-Requisite(s)     |                   | Block 4.1 |     |  |

## Course Description

The course is a clinical rotation in Radiology, where students will learn about the radiology of the different body systems and gain knowledge about the basic principles of diagnostic imaging modalities, the contrast media and radiation types, hazards and protection. And also learn how to perform a focused abdominal sonography for trauma patient

## **Topics**

- Basic principles of radiology and imaging modalities.
- Radiology and Imaging of the Chest
- Radiology and imaging of the central nervous system
- Radiology and imaging of the Genitourinary system
- Radiology and imaging of the Gastrointestinal Tract
- Radiology and imaging of the musculoskeletal system
- Breast Imaging
- Interventional Radiology
- Focused Abdominal Sonography in Trauma (FAST)
- Contrast media
   Radiation types, hazards and protection

## **Learning Outcomes**

- Name different types of imaging modalities, recognize the measuring units used for each modality, know how to prepare a patient for radiological examination and list the types, doses and side effects of contrast materials used in radiological examinations.
- Describe the modality of choice for radiological diagnosis of certain pathological conditions, define the most commonly used radiological terms and outline the radiological differential diagnosis of the common radiological findings
- Describe the radiographic anatomy of the brain, chest and abdomen. And describe the standard views for each part of the body in plain X-ray.
- Accurately explain and evaluate the main principles of the different imaging modalities used in the clinical field and predict the imaging modality of choice for each of the common pathological conditions
- Evaluate the radiographic anatomy of the chest, brain and abdomen
- Predict the name of the imaging study, part examined, the view used and put a provisional differential radiographic diagnosis
- Able to perform FAST examination
- Demonstrate professional, respectable attitude at hospital and keep patient and file Confidentiality
- Demonstrate effective communication with colleagues, staff and peer group
- Show effective consultation with other physicians and other health care professionals with team work spirit and application of principles of advocacy, patient rights, and ethics
- Manipulate the imaging films correctly, examining them for technical aspects, employ basics principles of work for the study and assemble the view (s) used.

| Prepare a brief radiological report. |  |             |                          |                  |                     |             |  |  |  |
|--------------------------------------|--|-------------|--------------------------|------------------|---------------------|-------------|--|--|--|
| Assessment Tools                     | ⊠ osce   | <b>%</b> 30 | Short Exams              | <b>%</b> 10<br>0 | Final Written Exam  | <b>%</b> 30 |  |  |  |
|                                      | Individual<br>Assignmen<br>ts  | <b>%</b> 20 | Group<br>Assignment<br>s | %                | Oral Participations | %           |  |  |  |
| Main Reference                       | <ul> <li>1.Pradip PR. Lecture Notes: Radiology. 2nd ed. Massachusetts: WILEY<br/>Blackwell; 2006.</li> </ul>   |             |                          |                  |                     |             |  |  |  |
| Supporting References                | <ul> <li>2 .Sutton D. Radiology and Imaging for Medical Students. 7th ed. New York: Churchill Livingstone Inc.; 1998.</li> <li>3 .Armstrong P, Wastie ML. X-Ray Diagnosis. Oxford: Blackwell Scientific Publications; 1981.</li> <li>4 .Scally P. Medical Imaging (Oxford core text) Oxford: Oxford University Press; 2000.</li> <li>5 .Evans KT, Gravelle IH, Roberts GM, Hayward C. Clinical Radiology for Medical Students. 2nd ed. Butterworth-Heinemann; 1987.</li> <li>6 .Adam A, Dixon AK, Gillard J, Schaefer- Prokop C, Grainger RG. Grainger &amp; Allison's Diagnostic Radiology. 6th ed. London: Churchill Livingstone; 2014.</li> <li>www.learningradiology.com</li> <li>www.auntminnie.com</li> <li>Radiology and Radiographic Journals by RSNA</li> </ul> |             |                          |                  |                     |             |  |  |  |