**Mutah University**

**Academic development and Quality Assurance Center**

**Course Plan Specification Form**

**Course: Radiology**

**Faculty of Medicine**

**Department: Internal medicine**

**Academic Year: 2020-2021**

A. Course specification and |General information:

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| University of Mutah | Course Title: Radiology |
| Faculty of Medicine | Code: 1511501 |
| Department: Internal medicine | Credit Hours: 2.25 hours |
| Semester/Academic year: 2020-2021(full year) | Instructors: Teaching staff  |
| Office hours: 40 hours | Course level: Fourth year |

**B. Objectives and Expected Learning Outcomes:**

1. Knowledge and skills:

A. Lectures:

- Be familiar with common radiological exams and procedures.

- To know indications and contraindications of different radiological exams.

- Be familiar with basic radiological anatomy.

- Be able to identify and diagnose common and emergency pathological conditions

 using different radiological modalities.

B. Attitude ad communication skills:

- To be able to work as a team in Radiologically evaluating patients at different health

 levels.

- To master the communication skills with colleagues and patients.

C. Course Plan Distribution and Learning Resources

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|  | **Topics to be Covered during the 2 weeks of radiology** |
|  **Lectures and seminars** |
| 1. Introduction to Radiology
2. Chest radiology
3. Urinary tract radiology
4. Neuroradiology
5. Gastrointestinal radiology
6. Skeletal radiology
7. Pediatric radiology
8. Nuclear Medicine
 | 1. Modalities of radiology (X-ray, digital radiography, fluoroscopy, mammography, ultrasound, computed tomography, magnetic resonance imaging).
2. Contrast materials, their indications, contraindications, and interpretation in different systems.
3. Examples of different radiological modalities and discuss possible indications.
4. Different modalities used to evaluate chest

 pathology1. Chest radiological anatomy
2. Common chest pathologies seen on chest X-ray

 (inflammatory diseases of lung pneumonia and  tuberculosis, airways disease-emphysema, collapse  and bronchiectasis, sarcoiodosis, mediastinal  masses, lung  tumors and metastasis, pleural diseases, pleural  effusion and pneumothorax, cardiomegaly, heart  failure and pulmonary edema.1. The radiological modalities used to investigate urological problems
2. Common pathological entities of the urinary system on different radiological exams (congenital renal anomalies, urinary tract stones, urinary obstruction, polycystic kidney disease and renal tumors)
3. Radiological anatomy of nervous system
4. Indication of different imaging modalities in

 neuroradiology1. Common and emergency pathologies on CT (brain

 infarction, brain hemorrhage, head injury, epidural  hematoma, subdural hematoma, subarachnoid  hemorrhage, developmental anomalies of spine,  spondylosis, Spondylolisthesis, intervertebral disc  pathologies)1. The radiological modalities used to investigate GI

 problems and their indications1. The radiological features of common

 gastrointestinal pathologies (appendicitis,  gallbladder stones, acute  cholecystitis, small and large bowel obstruction,  air under diaphragm)1. The radiological modalities used to investigate

 skeletal problems and their indications1. The radiological features of common musculoskeletal pathologies (osteoarthritis, osteomyelitis, some bone tumors, bone metastasis, skeletal trauma)
2. The radiological features of common pediatric diseases (respirators distress of newborn, pneumonias, congenital diaphragmatic hernia, polycystic stenosis, bowel malrotation, intussusception, Hirschsprung,s disease, vesico-ureteric reflux, posterior urethral valve, rickets, congenital dislocation of hip joints
3. The concept of nuclear medicine
4. Normal exams of different nuclear medicine tests

 and some pathological entities1. Indications for common nuclear medicine exams
 |
| **Suggested learning resources** |

1. Blue print in Radiology

2. Lecture notes in Radiology

3. Clinical Medicine (Kumar and Clark)

4. McLeod’s Clinical examination

5. O line resources

D. Teaching Strategies

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| No. |  |
| 1 | Lectures  |
| 2 | Seminars and round table discussion |
| 3 | Tours in different sections of the radiology department |

**E. Methods of Assessment**

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| No. | Assessment Task | Proportion of Final Assessment |
| 1 | In course evaluation for daily activities  | 20% out of the total mark  |
| 2 | End-course Exam | 40% out of the total mark |
|  | Final written MCQ comprehensive Exam | 40% out of the total mark |
| Total | 100% |

**F. General Instructions**

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| No. |  |
| 1 | All University rules are adopted strictly by the department |
| 2 | Days of absence during the course are included in daily assessment of the student  |