## (Module Name) Course Catalogue 2022-2023

| Institute | Erbil Medical Technical Institute |  |
| :---: | :---: | :---: |
| Department | Radiology |  |
| Module Name | Principle of Radiographical Imaging |  |
| Module Code | PRI204 |  |
| Semester | 2 |  |
| Credit | 7 |  |
| Module type | Prerequisite |  |
| Weekly hours |  |  |
| Weekly hours (Theory) | $(2)$ hr Class | ( 24 ) hr Workload |
| Weekly hours (Practical) | ( 3 )hr Class | ( 36)hr Workload |
| Lecturer (Theory) |  |  |
| E-Mail | aza.ismael@epu.edu.iq |  |
| Lecturer (Practical) |  |  |
| Email |  |  |

## Course Book

- Course overview:

This is a course, which consists of (2) hours theoretical lecture and (2) hours practical lectures per week for (16) weeks, designed to develop the students' ability to introduction to radiographic positing, explain that how deferent radiographic positions are taken. Power point presentations will be prepared on weight board and should be completed during the lectures.

- Course objective:

The purpose of this course is to enable the student to gain familiarity with Emphasis is placed upon different body parts how they can take an X-ray what is a basic and additional views with alternative view according to patient condition

At the conclusion of this course the student should be able to demonstrate through written examinations, quizzes, and oral discussion the following achievements:

1. introduction to radiographic terminology
2. Demonstrate and understanding of basic radiographic positions
3. Body Planes, Sections, and Lines
4. Body Surfaces and Parts
5. Common Projection Terms
6. Body Positions
7. Relationship Terms and movements
8. Demonstrate an understanding of different views in different parts of the body.
9. Demonstrating how alternative view to be taken if patient cannot perform standard view.
10.Understanding the conditions that x-ray contraindicated.
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    Student's obligation
The students should be attendance and complete of all tests, exams and assignments.
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- Forms of teaching
lecture halls with data show equipment for lecture presentations, white board, overhead projector, films.
- Assessment scheme

10\% Mid. Theory exam
15\% Mid. practical exam
8\% Quiz
2\% Class Activity
5\% homework
$10 \%$ seminars and reports
10\% Activities and lab reports
20\% final practical
20\% final theory

Theory: lecture halls with computers equipment for lecture presentations, white board, and data show projector.

## Laboratory practice:

1. Radiographic anatomical imaging by viewer or projector.
2. Skeletal and anatomical models.
3. Possible online anatomical and skeletal tutorials.

General: library, computer collection with internet access.

- Course Reading List and References:

List those textbooks $\qquad$

1. Anatomy for diagnostic imagining by S.P.Ryan. M.M.J. mc Nicholus.
2. Radiographic anatomy and positioning Andrea Gautbier and Diane H. Gronefeld. Grays Atlas of anatomy. By Richard L.D.A.wayne vole.

| - Course topics (Theory) | Week | Learning Outcome |
| :---: | :---: | :---: |
| 1. Toes, AP, Oblique-medial or lateral rotation, Lateral-mediolateral or lateromedial and Tangential-Sesamoids | 1 | 1 |
| 2. Foot, AP, Oblique, Lateral, AP weight bearing and Lateral weight bearing | 2 | 2 |
| 3. Calcaneus, Plantodorsal (axial) and Lateral | 3 | 3 |
| 4. Ankle, $\mathrm{AP}, \mathrm{AP}$ mortise ( $15^{\circ}$ to $20^{\circ}$ oblique), AP oblique $\left(45^{\circ}\right)$, Lateral, and AP Stress | 4 | 4 |
| 5. Leg-tibia and fibula, AP and Lateral | 5 | 5 |
| 6. Knee, AP, Oblique-medial rotation, Obliquelateral rotation, Lateral, AP weight bearing bilateral, and PA axial weight-bearing (Rosenberg method) | 6 | 6 |
| 7. Knee-intercondylar fossa, PA axial (Camp Coventry and Holmblad methods, including variations), and AP axial, | 7 | 7 |
| 8. Patella and femoropatellar joint, PA , Lateral, Tangential—axial or sunrise/skyline (Merchant method), Tangential (inferosuperior, Hughston, and Settegast methods), and Superoinferior sitting tangential method Hobbs modification | 8 | 8 |
| 9. Femur, AP-mid and distal, Lateralmediolateral or lateromedial: femur-mid and proximal and Lateral-mediolateral: femurmid and proximal | 8 | 9 |
| 10.Pelvis, AP pelvis, AP bilateral "frog-leg" (modified Cleaves method), AP axial outlet (Taylor method) | 10 | 10 |
| 11.Pelvis, AP axial inlet, Posterior obliqueacetabulum (Judet method), PA axial obliqueacetabulum (Teufel method) | 11 | 11 |


| 12. Hip and proximal femur, AP unilateral hip, <br> Axiolateral, inferosuperior (Danelius-Miller <br> method), Unilateral frog leg mediolateral <br> (modified Cleaves method) and Modified <br> axiolateral-possible trauma (Clements <br> Nakayama method) | 12 | 12 |
| :--- | :--- | :--- |
|  | Week | Learning |
| Outcome |  |  |


| 10.Pelvis, AP pelvis, AP bilateral "frog-leg" <br> (modified Cleaves method), AP axial outlet <br> (Taylor method) | 10 | 10 |
| :---: | :--- | :--- |
| 11. Pelvis, AP axial inlet, Posterior oblique- <br> acetabulum (Judet method), PA axial oblique- <br> acetabulum (Teufel method) | 11 | 11 |
| 12. Hip and proximal femur, AP unilateral hip, <br> Axiolateral, inferosuperior (Danelius-Miller <br> method), Unilateral frog leg mediolateral <br> (modified Cleaves method) and Modified <br> axiolateral-possible trauma (Clements <br> Nakayama method) | 12 | 12 |

## Examinations:

1. Compositional: In this type of exam the questions usually start with Explain how, what are the reasons for...? Why ...? How....?
With their typical answers
Examples should be provided

## 2.True or false type of exams:

In this type of exam, a short sentence about a specific subject will be provided, and then students will comment on the trueness or falseness of this particular sentence. Examples should be provided

## 3. Multiple choices:

In this type of exam there will be a number of phrases next or below a statement, students will match the correct phrase. Examples should be provided.

- Extra notes:

Here the lecturer shall write any note or comment that is not covered in this template and he/she wishes to enrich the course book with his/her valuable remarks.

## - External Evaluator

