**BMR 2214 EQUIPMENT/MAINTENANCE AND SERVICING**

Course description: The course aims to study of the physical aspects and Quality assurance of advanced imaging systems such as, fluoroscopic systems, ultrasound, computed tomography, and magnetic resonance imaging. Proper equipment maintenance, detection of faults and quality control protocols is emphasized.

Purpose:

To enable the student learn and appreciate preventive maintenance, Quality Assurance and basic Quality

Control checks of the equipment used in imaging.

Course Objectives: By the end of the course, the student should be able to:

1. Discuss the importance of proper equipment maintenance

2. Identify simple faults and perform simple correction procedure

3. Perform equipment quality control

4. Perform effective quality assurance procedure.

5. Appreciate the importance of equipment maintenance

Expected outcomes/Competencies:

-A student who is knowledgeable about the importance of equipment maintenance

-A student with skills to perform basic Quality control checks

-A student who demonstrates ability to design effective Quality assurance mechanisms

Course Content: Preventive maintenance

- Proper care of equipment

- Cleaning of equipment

- Operation procedures

Quality control

- Equipment performance parameters

Servicing

- Log books, planning

- Fault detection

-Equipment operational procedures.

- First line maintenance of equipment.

-Care of equipment

- Equipment performance parameters

- Quality assurance procedures.

- Proper record keeping for equipment performance.

Pedagogical methods (Delivery methods):

Over-view lectures, Small group tutorials with a Tutor, Self-directed study, Wrap-up seminars, Question and answer sessions, Skills training, Assignments, practicals and Videos for watching.

Assessment methods:

There shall be an assessment blue-print for assessment.

Formative and summative assessment shall be conducted through MCQs. Essays, short answer questions, Objective Structure Clinical Examination (OSCE), Objective Structure Practical Examination (OSPE) and logbook/ Portfolio

Course duration: 2 weeks

Requirements: 30 CH, 2CU Resources & Infrastructure available:

Libraries, Book banks, Tutorial rooms, Computer services and internet, Content experts and audiovisual materials/ resources. X-ray (Laboratory) rooms

And IT Labs