**BMR 3213 – NUCLEAR MEDICINE**

Course description:

This course introduces students to Nuclear Medicine where students learn knowledge, skills and attitudes in carrying out nuclear medicine investigations.

Purpose:

To facilitate the student acquire knowledge, skills and attitudes in carrying nuclear medicine investigations as well as demonstrate appropriate behavior towards patients.

Course Objectives: By the end of the 5 weeks, the student should be able to:

1. Describe the different radiopharmaceuticals

2. Define the principles of nuclear medicine

3. Describe the purpose of nuclear medicine in the diagnosis of physiological abnormalities and oncology.

4. Discuss quality assurance, future aspects and research in nuclear medicine.

5. Demonstrate the techniques of carrying out nuclear medicine investigations of the various body systems

6. Demonstrate appropriate behavior towards patients

7. Apply priciples of radiation protection to self, patients and public.

8. Identify abnormalities seen on nuclear medicine images

Expected outcomes/Competencies:

1. Ability to carry out nuclear medicine investigations

2. Skills in radiation protection

3. Demonstration of appropriate professional behavior

4. Ability to perform basic QC tests.

Content outline:

• Radiopharmaceuticals.

• Normal appearances of the various anatomical structures on nuclear medicine images

• Nuclear medicine in diagnosis anatomical abnormalities; principles of nuclear medicine; nuclear medicine in diagnosis of physiological abnormalities; nuclear medicine in oncology; quality assurance; future aspects and research.

• Abnormalities seen on nuclear medicine, patho-physiology and appearances.

Means of delivery:

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

Assessment strategies:

There shall be an assessment blue-print for each type of assessment tool chosen.

Formative and summative assessment shall be conducted through MCQs. Modified essays, short notes,Objective Structure Clinical Examination (OSCE), Objective Structure Practical Examination (OSPE) and logbook

Logbook/Portfolio:

A student shall be responsible for keeping a log book of her/his practical experiences for presentation to the Course coordinator before a Certificate of due Performance is issued. The number of cases for the logbook are indicated for each case. The Portfolio shall be used to show evidence of learning by the student as well as reflection which are not captured by the logbook.

There shall be an assessment and feedback session for every student and tutor at the end of every tutorial session.This will include:

a) Continuous assessment during all the learning sessions. This permits immediate feedback. In addition to Logbooks. This will contribute 40% of the mark

b) An end of the block examination consist of:

• Individualized process assessment.

• Modified essay questions.

• Oral examination (OSCE & OSPE)

• MCQs.

Resources & Infrastructure available:

Library (both in the Radiology department and Sir Albert Cook library), Tutorial rooms, Computer services and internet, Content experts, Patients and Teaching-Hospital.

Course duration: 5 Weeks

Requirements: 75 CH, 5CU