**BMR 3113 – CLINICAL CT & MRI**

Course description:

This course introduces students to the practical application of clinical CT & MRI that includes the operation and pathological manifestations. It is a highly clinical course that requires students to spend a lot time in the clinical area.

Purpose:

To facilitate the student acquire knowledge, skills and attitudes in applying the principles of CT & MRI in medicine.

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

1. Discuss the principles of CT& MRI

2. Demonstrate ability to carry out CT and other investigations of the CNS, chest, head and neck, abdomen, pelvis and musculo skeletal system. At least 25 cases of computer Tomography must be entered in the log book.

3. Demonstrate the skill of interpreting different pathologies as seen on CT and MRI

4. Demonstrate the skill of handling patients professionally during CT/MRI investigations

Expected outcomes/Competencies:

1. Ability to carry out CT & MRI procedures

2. Ability to act professionally when handling patients through proper communication, ensuring privacy, confidentiality, respect, informed consent etc.

Content Outline:

• Principles of computer tomography.

• Principles of magnetic resonance Imaging; computer tomography & Magnetic Resonance

Imaging of central nervous system.

• Computer tomography and Magnetic Resonance Imaging of the abdomen and pelvis, chest, head and neck and musculo skeletal system.

Methods 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.

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 reflections 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