**BMR 2211 CLINICAL ULTRASOUND OF THE ABDOMEN**

Course description:

The unit covers the fundamental principles of ultrasound physics and instrumentation. The course discusses the normal sonographic anatomy and scanning techniques. The course also studies Patient preparation, indications, and limitations, of diagnostic imaging of gastrointestinal system, hepatobiliary system, spleen, and pancreas, intraperitoneal and retroperitoneal compartments including interpretation

of normal and abnormal conditions. Practical skills in ultrasonography are emphasized.

Purpose:

To enable the student learn the fundamental principles of ultrasound physics and instrumentation. And also learn the clinical application of the sonographic equipments.

Course Objectives:

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

1. Describe the nature, production and interaction of ultrasound

2. Identify sonographic artifacts

3. Explain the Knobology and Terminologies used in ultrasound

4. Identify and describe the various ultrasound systems

5. Demonstrate the ability to methodically scan abdominal organs.

6. Describe the normal sonographic anatomy of abdominal organs.

7. Describe the common Sonographic abdominal pathologies.

8. Understand the role and limitations of ultrasound in the management of common abdominal conditions.

9. Students are required to carryout ultrasound examination of the abdomen and document a minimum of 30 cases in the Logbook.

Expected outcomes/competencies

A student who:

• Is knowledgeable on the physics and operation of ultrasound equipment.

• Have skills to perform ultrasound examinations.

• Knows the normal findings and is able to identify the abnormalities in the abdomen.

• Is knowledgeable on patient care and management.

Content outline:

• Physics of Ultrasound

• Sonographic anatomy of the abdomen.

• Sonographic appearances of common abdominal pathologies.

• Methodical scanning of abdominal organs.

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 strategies:

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: 5 Weeks

Requirements: 75 CH, 5CU Resources & Infrastructure available:

Libraries, Book banks, Tutorial rooms, Computer services and internet, Content experts and audiovisual materials/ resources. Ultrasound machines, rooms, consumables and IT Labs.