

### **RADIOLOGIC TECHNOLOGY-MRI (RADM)**

**411. MRI Physics and Instrumentation.** Credit 3 hours. Prerequisites: PHSC 101 and admission into the Health Studies Clinical Option in Radiologic Technology. Provides an understanding of the applied physics involved in Magnetic Resonance Imaging. Topics include magnets and magnetism, electromagnetic spectrum, pulse sequences, parameters, tissue characteristics and coil designs. (Spring)

**414. MRI Procedures.** Credit 3 hours. Prerequisite: RADM 411. Course presents procedure protocols utilized in acquiring various images of anatomical systems using Magnetic Resonance Imaging. Patient positioning, orientation, scan sequences, coils, and artifacts are discussed. (Fall)

**419. MR Image Acquisition.** Credit 3 hours. Prerequisite: RADM 411. Covers components of MR Imaging in depth. Designed to impart an understanding of the functions of Magnetic Resonance Imaging systems and associated computer applications in the acquisition, processing, reconstruction, reformatting and storage techniques of images. Images will be evaluated for quality. (Fall)

**420. MRI Clinical Practicum I.** Credit 5 hours. Prerequisite: Permission of Department Head. Course offers practical clinical experience, in conjunction with RADM 413 and RADM 419. Course will provide opportunities to integrate and apply acquired knowledge of MRI procedures in the clinical setting. Competency-based assignments will be used to evaluate professional development. (Fall)

**424. MRI Clinical Practicum II.** Credit 5 hours. Prerequisite: Permission of Department Head. A continuation of MRI Clinical Practicum I. Offers practical clinical experience in obtaining competency in required MRI Procedures. This course will give the student opportunities to integrate and apply acquired knowledge of MRI procedures in the clinical setting. Competency-based assignments will be used to evaluate professional development. (Spring)