Miami Dade College

Course Description
RTE2577C | Magnetic Resonance Imaging (MRI) Practicum | 6.00 credits
This course is designed to provide the students with hands-on experience for body imaging. Students will learn to position the patients correctly inside the Magnetic Resonance Imaging (MRI) machine and program the machine to create axial, coronal, and sagittal images of the brain and spinal column.

Course Competencies
Competency 1: The student will gain hands-on knowledge of various scanning techniques used in neuroimaging by:
1. Positioning the patient inside the MR Gantry and programming the machine for various Neuro imaging protocols
2. Selecting the most appropriate coils for the MRI procedure and position them over the patient
3. Selecting the most appropriate MR scanning protocol based on the patient's diagnosis
4. Demonstrating proficiency in scanning the patient for all brain and spine MR Procedures
5. Positioning and programming for Axial, coronal & sagittal images of the Brachial plexus

Competency 2: The student will gain hands-on knowledge of various patient care techniques and MR safety protocols by:
1. Screening the patient for an MRI scan and removing all the metal artifacts
2. Taking the patient's clinical history and evaluating the study's appropriateness
3. Obtaining a valid consent for the MR procedure
4. Injecting the patient with appropriate paramagnetic contrast agents for tissue enhancement

Competency 3: The student will demonstrate proper functioning of the MRI Machine by:
1. Demonstrating correct functional MRI imaging techniques
2. Demonstrating MR Safety- Devices and monitors in MRI
3. Demonstrating various MR safety guidelines used in MRI

Learning Outcomes:
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information