

Course Competency

RTE 2577C Magnetic Resonance Imaging (MRI) Practicum

Course Description

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. Prerequisites: RTE 2762, RTE 2575, and RTE 2576.

Course Competency	Learning Outcomes
<p>Competency 1:Students will gain hands-on knowledge of various scanning techniques used in Neuro imaging by:</p>	<ol style="list-style-type: none"> 1. Critical thinking 2. Information Literacy
<ol style="list-style-type: none"> 1. 1. Positioning the patient inside the MR Gantry and programing 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. 	
<p>Competency 2:Students will gain hands on knowledge of various patient care techniques and MR safety protocols by:</p>	<ol style="list-style-type: none"> 1. Critical thinking 2. Information Literacy
<ol style="list-style-type: none"> 1. 1. Screening the patient for MRI scan and removing all the metal artifacts 2. Taking proper clinical history of the patient and evaluate the appropriateness of the study. 3. Obtaining a valid consent for the MR procedure. 4. Injecting the patient with appropriate paramagnetic contrast agents 	

for tissue enhancement	
Competency 3: Student will demonstrate proper functioning of the MRI Machine by:	1. Critical thinking
1. 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.	

Updated: FALL TERM 2023