

Course Competency

RAT 1615 Radiation Therapy Medical Imaging

Course Description

This course is an introductory study to radiographic processes which includes the processes behind computed tomography, magnetic resonance imaging, nuclear medicine, positron emitting tomography, and ultrasound as it pertains to simulation, detection, and diagnosis of cancer.

Course Competency	Learning Outcomes
<p>Competency 1: The student will demonstrate knowledge of computed tomography and Magnetic resonance imaging by:</p>	<p>1. Information Literacy</p>
<ol style="list-style-type: none"> 1. Differentiating between computed tomography and magnetic resonance. 2. Explaining computed tomography and magnetic resonance use in health care imaging. 3. Describing how CT and MRI are used for detection and diagnosis of cancer. 	
<p>Competency 2: The student will demonstrate knowledge of nuclear medicine, positron emitting tomography and ultrasound by:</p>	<p>1. Information Literacy</p>
<ol style="list-style-type: none"> 1. Describing nuclear medicine use with detection and diagnosis of cancer. 2. Describing positron emitting tomography use with detection and diagnosis of cancer. 3. Describing ultrasound use with detection and diagnosis of cancer. 	
<p>Competency 3: The student will demonstrate knowledge of radiography by:</p>	<p>1. Information Literacy</p>
<ol style="list-style-type: none"> 1. Describing the components & operation of a radiographic circuit. 2. Explaining the components of an x-ray tube and their related functions. 	

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| <ol style="list-style-type: none">3. Describing image density and contrast and the factors that affect it.4. Describing image distortion and detail and the factors that affect it.5. Determining the methods and rationale for beam restriction. | |
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Updated: FALL TERM 2023