

## **Course Description**

**RTE2010 | New Imaging Modalities in Radiology | 1 credit**

This course will enable the student to compare and contrast the current imaging modalities with the emerging technologies available in Radiology departments. Included in this course will be picture archiving and communications systems (PACs), digital imaging, and fusion imaging. This course includes a preparation for the American Society of Radiologic Technologists Registry exam in Radiography.

## **Course Competencies**

### **Competency 1:**

**The student will be able to demonstrate basic knowledge, comprehension and application of pictorial archiving and communications systems (PACS) by:**

- describing the components of PACS
- identifying the advantages of PACS
- identifying common problems associated with retrieving/viewing images within a PACS

#### **Learning Outcomes:**

- Numbers / Data
- Information Literacy
- Computer / Technology Usage

### **Competency 2:**

**The student will be able to demonstrate basic knowledge, comprehension and application of fusion imaging by:**

- comparing and contrasting fusion imaging with diagnostic radiography.
- describing the parameters of fusion imaging.
- identifying the uses of fusion imaging in the diagnosis of disease

#### **Learning Outcomes:**

- Numbers / Data
- Critical thinking
- Information Literacy
- Computer / Technology Usage

### **Competency 3:**

**The student will be able to demonstrate basic knowledge, comprehension and application of digital imaging by:**

- recognizing the components of a digital imaging system.
- comparing and contrasting digital imaging and conventional radiography.
- describing the image production in digital imaging.
- discussing electronic imaging equipment used in radiography and fluoroscopy.
- explaining flat panel detectors used in digital electronic x-ray equipment

**Learning Outcomes:**

- Numbers / Data
- Critical thinking
- Information Literacy