MONROE COUNTY COMMUNITY COLLEGE

Course Outcome Summary

Required Program Core Course

RAD 110 – Radiation Physics

Course Information

Division	**Health Sciences**
Contact Hours	**2**
Theory	**30**
Lab Hours	**0**
Total Credits	**2**

Prerequisites Acceptance into the Radiography Program

Co-requisites
RAD 100 – Introduction to Rad Tech
RAD 113 – Radiation Biology
BIOL 258 – Anatomy & Physiology II

Course Description

Radiation Physics is a course designed to prepare students with a basic understanding of the principles of radiation physics, X-Ray production and Interactions. Areas of concentration include Units of Measurement, Forces, Motion, Electrostatics, Magnetism, Basic Electrical Circuits, and Atomic and Nuclear Physics. Emphasis will be placed on the study of ionizing radiation which is especially important to the Radiographer. Two hours per week will be devoted to lecture, discussion, and hands on experiments

This course is a required core course for students pursuing an Associate of Applied Science - Radiography

Program Outcomes Addressed by this Course:

The successful completion of this course will assist students towards meeting the following program outcomes:

A. demonstrate the knowledge and skills necessary for competency as an entry-level Radiologic Technologist/Radiographer by operating and manipulating radiographic equipment to produce high-quality images and by practicing safe patient care for a diverse population.

Course Outcomes

In order to evidence success in this course, the students will be able to:

1. describe fundamental aspects of nuclear and atomic physics.
   Applies to Program Outcome A

2. discuss the physical nature of x-rays.
   Applies to Program Outcome A

3. describe the processes that produce x-rays in radiological equipment.
   Applies to Program Outcome A

4. state the fundamental principles of electrical engineering as relevant to radiologic equipment.
   Applies to Program Outcome A

5. describe the operation and components of AEC devices and chambers.
   Applies to Program Outcome A

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