

CUMBERLAND COUNTY COLLEGE

Course: RT 104 Radiographic Exposure I

Credits: 2

Prerequisites

None

Co-requisites:

RT101, RT102, RT103, BI 106

Course Description

This course introduces the student to the principles of x-ray production and the evolution of medical imaging. Emphasis will be placed on the primary factors needed to produce a radiograph and their effect on image quality.

Learning Outcomes

At the completion of this course, students will be able to:

- Demonstrate the principles of image production using radiographic equipment in the classroom laboratory and clinical setting
- Analyze radiographs and make judgments relating to the quality of the radiographic images.
- Manipulate the factors used in the production of a radiograph to improve an image when presented with a poor quality radiograph.
- Demonstrate the ability to change the factors of image production for varying patient conditions and equipment limitations.

Topical Outline

- Radiation and Its Discovery
- X-Ray Tube
- X-Ray Beam
- Image Formation
- Scatter Control

Required Texts and Other Materials

Terri L. Fauber, *Radiographic Imaging & Exposure*, 4th Edition Elsevier Mosby, 2013.

James N. Johnson, Terri L. Fauber, *Radiographic Physics and Imaging*, Elsevier Mosby, 2012.

Student Assessment

Assessment will be accomplished through exams and related student clinical assignments.

The grade for this course will be determined as follows:

- Tests = 75%
- Final Exam = 25%

Class absences will be deducted from the course grade as follows:

- 0.50 for each absence and
- 0.25 for each lateness or early departure.

Academic Integrity

Plagiarism is cheating. Plagiarism is presenting in written work, in public speaking, and in oral reports the ideas or exact words of someone else without proper documentation. Whether the act of plagiarism is deliberate or accidental [ignorance of the proper rules for handling material is no excuse], plagiarism is, indeed, a “criminal” offense. As such, a plagiarized paper or report automatically receives a grade of **ZERO** and the student may receive a grade of **F** for the semester at the discretion of the instructor.

Available Resources

If you are having difficulty with work in this class, tutoring is available through the Success Center. If you think that you might have a learning disability, contact Project Assist at 856.691.8600, x1282 for information on assistance that can be provided to eligible students.

(List availability of open labs and/or writing center)

Before Withdrawing From This Course

If a student experiences adverse circumstances while enrolled in this course and considers withdrawing, s/he should see an advisor (division or advisement center) BEFORE withdrawing from the class. A withdrawal may cause harmful repercussions to completion rate standards and overall GPA which can limit or eliminate future financial aid in addition to causing academic suspension.