MOHAWK VALLEY COMMUNITY COLLEGE, UTICA-ROME, NY

Radiological Technology

COURSE OUTLINE

1. COURSE DESCRIPTION:

**RT105 Image Production & Evaluation I** C-2, P-0, CR-2

This course provides students with a knowledge base in factors that govern the image production process. Film-screen imaging with related accessories, including radiographic grids, is emphasized. The components, principles, and operation of digital imaging systems found in diagnostic radiology are discussed.

**Prerequisites:** RT100, RT101, RT102, RT103

**Corequisites:** RT104, RT106, RT107

1. STUDENT LEARNING OUTCOMES

**Upon completion of this course the student will be able to:**

1. Define a radiographic grid and its related terms: grid efficiency ratio, frequency, and selectivity.
2. Explain the construction of the various types of radiographic grids.
3. Define and summarize the factors that influence grid cutoff.
4. Recognize the radiographic appearance of the various forms of grid cutoff.
5. Discuss the fundamentals of digital radiography, distinguish between cassette-based systems and cassette-less systems.
6. Examine the potential impact of digital radiography on patient exposure and methods of practicing the ALARA concept with digital systems.
7. Perform and analyze laboratory experiments regarding digital images under simulated conditions.
8. MAJOR TOPICS:
9. Radiographic Grids
10. Digital Imaging