RADIOLOGIC TECHNOLOGY

Course Title: **RADIOGRAPHIC IMAGING I**
Course Prefix/No.: **RAD 110**
Credit Hours: **3.0**
Lecture Hours: **2.0**
Lab Hours: **3.0**

Distance Learning Attendance/VA Statement
Textbook Information

COURSE DESCRIPTION

This course provides detailed study of the parameters controlling radiation quality and quantity for radiographic tube operation and image production.

COURSE COMPETENCIES

Upon successful completion of this course, the student should be able to demonstrate the following basic competencies:

- Identify properties of matter and energy
- Define properties of x-rays
- Understand basic construction of the x-ray tube
- Explain basic principles of x-ray production and control
- Recognize prime factors of x-ray control and their relationships
- Describe basic components of radiographic film
- Explain proper film storage and handling
- Understand automatic processing
- Apply basic principles of sensitometry
- List radiographic darkroom components
- Recognize common radiographic artifacts
- Explain silver recovery systems
- List cassette and intensifying screen components and specific function
- Understand film-screen combinations and applications

ENTRY LEVEL SKILLS

A student entering this course must be enrolled in the Radiologic Technology Program as a first-year student.

PREREQUISITES

RAD 102, RAD 101, RAD 152

CO-REQUISITES

RAD 105, RAD 130, RAD 165

METHODS OF INSTRUCTION

This course is offered in a "hybrid" format. This means that the course is an internet course, but there will be some "On-Campus" activities that are required. A CD Rom will accompany the course syllabus and required text(s) that you purchase at the York Tech Bookstore. Quizzes, course calendar, email and bulletin board messages are accessed via the internet in WebCT.

Principles will be introduced by the following instructional methods:

- PowerPoint presentations by the instructor
- Lecture
- Video tapes and computer-based lessons
- Laboratory activities and demonstration.

COURSE REQUIREMENTS

All students are responsible for attaining competencies through the completion of the following course requirements:

- Participating in class/lab activities as scheduled in the calendar
- Reading all assigned materials as listed in syllabus
- Completing all tests as scheduled as listed in the syllabus and scheduled in the calendar
- Completing all CAI assignments
- Completing all videotape viewing assignments that may be required.
- Participating in all electronic bulletin board discussions/assignments as required.
- Attending class

ACADEMIC INTEGRITY

The policies stated in the ***YTC Catalog and Handbook*** and ***Radiologic Technology Student Manual*** will be enforced. Any student violating the policy may be subject to academic discipline as stated.

ATTENDANCE POLICY

The attendance policy as stated in the ***Radiologic Technology Student Manual*** will be enforced. Absences shall not exceed a maximum of 10% of the number of class meetings for the semester.

GRADING PROCEDURES

Approximately six unit tests will be given. All students are required to take the final examination to complete the course. Students who have a minimum grade of 80% on all unit tests will have the option not to include the final examination grade in their final course average. Any student who scores below 80% on a unit test and does not maintain an overall "A" average in the course will be required to include the final examination grade in his/her final course average. The final examination will count 1/3 of the final course grade

6 Unit tests + CAI Avg. = 66% of the final grade
Final exam = 33% of the final grade

The following grading scale applies:

GRADE	SCORE
A	93-100
B	86-92
C	80-85
D	70-79
F	BELOW 70

MAKE-UP TESTS

All tests will be administered in the Assessment Center in B Building. Test deadlines will be listed in the online course calendar. Students should report 10 minutes before the scheduled test time. A picture ID is required at the time of the test - NO EXCEPTIONS.

PERFORMANCE OBJECTIVES/MINIMAL STANDARDS

Performance objectives for each topic (unit) are included in this syllabus addendum. A minimum grade of 80% is required to pass the course (See Grading Procedures in the **Radiologic Technology Program's Student Manual**).

Disability Statement: Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Special Resources Office (SRO) at 803-327-8007 in the 300 area of Student Services. The SRO coordinates reasonable accommodations for students with documented disabilities.

EFFECTIVE: FA2006