

Course Number and Title: RAD 222 Selected Topics in Radiography

Campus Location:

Effective Date:

2021-51

Prerequisite:

RAD 260

Co-Requisites:

none

Course Credits and Hours:

3.00 credits

3.00 lecture hours/week

0.00 lab hours/week

Course Description:

This course is a review of program content in preparation for the American Registry for Radiologic Technologists (A.R.R.T) examination. The student will focus on content areas that are relevant to the registry and identify areas where remediation may be necessary.

Required Text(s):

Obtain current textbook information by viewing the [campus bookstore - https://www.dtcc.edu/bookstores](https://www.dtcc.edu/bookstores) online or visit a campus bookstore. Check your course schedule for the course number and section.

Additional Materials:

Radiologic Technology Student Handbook Separate instructor handouts and assignments

Schedule Type:

Classroom Course

Disclaimer:

In order to achieve the maximum benefit from this course of instruction, the student is responsible for attending scheduled classes, completing all readings and instructor assignments, and actively participating in class discussion and activities. The instructor will announce the schedule for written tests.

Core Course Performance Objectives (CCPOs):

1. Review concepts of Radiation Protection principles. (CCC 2, 4, 6; PGC 3)
2. Review Equipment Operation and Quality Control measures. (CCC 2,4, 6; PGC 4)
3. Review Image Acquisition and Evaluation concepts and theories. (CCC 2, 4, 6; PGC 4)
4. Review Imaging Procedures for the anatomic regions listed on the American Registry of Radiologic Technologists (A.R.R.T.) content specifications. (CCC 2, 5; PGC 1, 4)
5. Review Patient Care and Education relative to registry content. (CCC 1, 2, 3, 4; PGC 1, 2, 3, 4)

See Core Curriculum Competencies and Program Graduate Competencies at the end of the syllabus. CCPOs are linked to every competency they develop.

Measurable Objectives (MPOs):

Upon completion of this course, the student will:

1. Review concepts of Radiation Protection principles.
 1. Biological aspects of radiation
 2. Minimizing patient exposure
 3. Personnel protection
 4. Radiation exposure and monitoring
2. Review Equipment Operation and Quality Control measures.
 1. Principles of radiation physics
 2. Imaging equipment
 3. Quality control of imaging equipment and accessories
3. Review Image Acquisition and Evaluation concepts and theories.
 1. Technical factors
 2. Image processing and quality assurance
 3. Criteria for image evaluation
4. Review Imaging Procedures for the anatomic regions listed on the American Registry of Radiologic Technologists (A.R.R.T) content specifications.
 1. Thorax
 2. Abdomen and GI studies
 3. Urological studies
 4. Spine and pelvis
 5. Head
 6. Extremities
 7. Other special procedures
5. Review Patient Care and Education relative to registry content.
 1. Ethical and legal aspects
 2. Interpersonal communication
 3. Infection control
 4. Physical assistance and transfer
 5. Medical emergencies
 6. Pharmacology
 7. Contrast media

Evaluation Criteria/Policies:

The grade will be determined using the Delaware Tech grading system:

90	-	100	=	A
80	-	89	=	B
70	-	79	=	C
0	-	69	=	F

Students should refer to the [Student Handbook - https://www.dtcc.edu/handbook](https://www.dtcc.edu/handbook) for information on the Academic Standing Policy, the Academic Integrity Policy, Student Rights and Responsibilities, and other policies relevant to their academic progress.

Final Course Grade:

Calculated using the following weighted average

Evaluation Measure	Percentage of final grade
Exams (6)	90%
Quizzes / Homework (formative)	10%
TOTAL	100%

Core Curriculum Competencies (CCCs are the competencies every graduate will develop):

1. Apply clear and effective communication skills.
2. Use critical thinking to solve problems.
3. Collaborate to achieve a common goal.
4. Demonstrate professional and ethical conduct.
5. Use information literacy for effective vocational and/or academic research.
6. Apply quantitative reasoning and/or scientific inquiry to solve practical problems.

Program Graduate Competencies (PGCs are the competencies every graduate will develop specific to his or her major):

1. Demonstrate clinical competence by performing a full range of radiologic procedures on all patient populations.
2. Professionally utilize verbal, nonverbal and written communication in patient care intervention and professional relationships.
3. Demonstrate professional growth and development by practicing the profession's code of ethics and comply with the profession's scope of practice.
4. Demonstrate critical thinking and problem solving skills in the performance of radiographic procedures.

Disabilities Support Statement:

The College is committed to providing reasonable accommodations for students with disabilities. Students are encouraged to schedule an appointment with the campus Disabilities Support Counselor to request an accommodation needed due to a disability. A listing of campus Disabilities Support Counselors and contact information can be found at the [disabilities services - https://www.dtcc.edu/disabilitysupport](https://www.dtcc.edu/disabilitysupport) web page or visit the campus Advising Center.