

Course Number and Title: RAD 131 Radiographic Procedures II

Campus Location:

Georgetown, Wilmington

Effective Date:

2021-51

Prerequisite:

RAD 130

Co-Requisites:

none

Course Credits and Hours:

4.00 credits

3.00 lecture hours/week

3.00 lab hours/week

Course Description:

This course provides the student with the knowledge and skill necessary to perform standard radiographic procedures of the bony thorax, vertebral column, urinary, biliary, and gastrointestinal systems, as well as, identification of the anatomy demonstrated. Mobile, surgical, and trauma radiography are discussed. Energized laboratory experience supports the lecture portion of this course.

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. Describe the anatomy and essential projections for various examinations. (CCC 1; PGC 1, 2)
2. Discuss procedural considerations for radiographic examinations. (CCC 2, 6; PGC 1, 4)
3. Evaluate radiographic images. (CCC 5; PGC 1, 4)
4. Discuss preparation for and role of the technologist during fluoroscopic studies of the urinary, biliary, and digestive systems. (CCC 1, 2, 3, 6; PGC 1, 4)
5. Simulate selected radiographic procedures through proper use of radiographic lab equipment. (CCC 2, 6; PGC 4)

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

Measurable Performance Objectives (MPOs):

Upon completion of this course, the student will:

1. Describe the anatomy and essential projections for various examinations.
 1. Vertebral column
 2. Bony thorax
 3. Digestive system
 4. Urinary system
 5. Biliary system
2. Discuss procedural considerations for radiographic examinations.
 1. Patient preparation
 2. Breathing instructions
 3. Radiation protection
 4. Image receptors
 5. Modifications for body habitus
 6. Modifications for non-routine patients
 7. Technical factors
3. Evaluate radiographic images.
 1. Identify anatomical structures on various projections.
 2. Determine proper versus improper part positioning and centering.
 3. Evaluate projections for shape and size distortion.
 4. Determine the use of appropriate collimation.
4. Discuss preparation for and role of the technologist during fluoroscopic studies of the urinary, biliary, and digestive systems.
 1. Patient preparation
 2. Room preparation
 3. Preparation of contrast media
 4. Consent for contrast media
 5. Contrast media reactions
 6. Patient care during procedures
 7. Technical factor selection
 8. Shielding
 9. Timed studies
5. Simulate selected radiographic procedures through proper use of radiographic lab equipment.
 1. Demonstrate proper patient positioning.
 2. Align x-ray tube/part/image receptor properly.
 3. Demonstrate effective means of radiation protection.
 4. Demonstrate use of x-ray table and/or upright bucky.
 5. Select appropriate technical factors on the control console.

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 (5)	70%
Quizzes/Assignments (formative)	10%
Lab Competencies/Simulation (rubric provided)	20%
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.