

# Common Course Outline

## RADT 201

### Radiography III

7 Semester Hours

## The Community College of Baltimore County

### Description

**RADT 201 – 7 credits – Radiography III** is the fifth course in the sequence of radiography courses that comprise the professional portion of the radiography curriculum. It consists of both a didactic portion and a clinical portion. The didactic portion of RADT 201 consists of three (3) modules: Anatomy & Positioning of the Skull/Face, Contrast Procedures: Digestive System, and Special Radiographic/Fluoroscopy Procedures. During the clinical portion of RADT 201, students will continue to achieve additional clinical skills by participating in the actual procedures performed in a radiology/medical imaging department.

**Credit Hours: 4 lecture hours, 24 clinical hours, and 2 lab hours per week**

**Pre-requisites: RADT 112**

### Overall Course Objectives

Upon successful completion of Anatomy & Positioning of the Skull/Face, students will be able to:

1. describe the anatomy of the skull and face that can be demonstrated on radiographs;
2. identify skull and face anatomy on diagrams and radiographs; and
3. describe the patient preparation, patient position, part placement, film selection/ placement, beam alignment/angulation, collimation/shielding, and any special considerations for the following radiographic examinations:
  - a. cranium
  - b. facial bones
  - c. orbits
  - d. nasal bones
  - e. sinuses
  - f. mandible
  - g. zygomatic arches
  - h. temporomandibular joints
  - i. mastoids.

Upon successful completion of Contrast Procedures: Digestive System, students will be able to:

1. identify digestive anatomy on diagrams and radiographs;
2. describe the patient preparation and discharge instructions for examinations of the digestive system;
3. identify equipment and supplies for examinations of the digestive system;
4. describe the use of positive and negative contrast media, barium compounds and oral iodine based agents;
5. describe the general procedure for examinations of the digestive system;

6. describe patient positioning for imaging during digestive examinations;
7. differentiate between different views and patient positions on radiographs; and
8. describe the equipment/supplies including contrast media, patient preparation/instructions, patient position, part placement, film selection/placement, beam alignment/angulation, and general procedure for the following special procedures:
  - a. upper gastrointestinal studies
  - b. small bowel series
  - b. barium enemas
  - c. esophograms
  - d. modified barium swallows.

**Upon successful completion of Special Radiographic/Fluoroscopic Procedures, students will be able to:**

1. identify urinary anatomy on diagrams and radiographs;
2. describe the patient preparation and discharge instructions for examinations of the urinary system;
3. identify equipment and supplies for examinations of the urinary system;
4. describe the use of ionic and non-ionic contrast media, and the special precautions that must be taken prior to its intravenous injection;
5. describe the general procedure for radiographic examinations of the urinary system;
6. describe patient positioning for imaging during urinary examinations;
7. differentiate between different views and patient positions on radiographs;
8. describe the equipment/supplies including contrast media, patient preparation/instructions, patient position, part placement, film selection/placement, beam alignment/angulation, and general procedure for the following special procedures:
  - a. arthrography
  - b. endoscopic retrograde cholangiopancreatography
  - c. hysterothorography
  - d. fistulagram
  - e. myelography
  - f. sialography
  - g. intravenous pyelograms
  - h. cystography
  - i. t-tube cholangiograms
  - j. cholangiograms
  - k. voiding cystourethrogram
  - l. fistulagrams; and
9. Given various special procedure images, identify the specific procedure being done, the structure visualized, and the function demonstrated.

**During the clinical education portion of RADT 201, students will:**

1. complete demonstration/practice sessions for category V (spine and thorax), category IV (contrast studies, digestive and urinary), and category VII (skull and face);
2. complete labs (evaluations) for category V (spine and bony thorax), and category VII (skull and face);
3. continue to present films for image evaluation in category I (chest/abdomen), category II (upper extremity), category III (lower extremity), and category V (spine and bony thorax);
4. complete competency tests for category I (chest and abdomen), category II (upper extremity), and category III (lower extremity). A minimum of 12 successful competency tests must be completed during RADT 201;

5. complete area specific performance objectives for scheduled RADT 201 clinical areas;
6. prepare and present a film critique report;
7. prepare written and oral updates on scientific essay/exhibit for the annual MSRT conference;
8. complete the corresponding chapters in the Bontrager's workbook; and
9. demonstrate appropriate professional behavior while on clinical duty.

## **Major Topics**

List of major topics in outline form.

- I. Skull and Facial Bones
  - a. Anatomy
    1. cranium
    2. facial bones
    3. orbits
    4. nasal bones
    5. sinuses
    6. mandible
    7. zygomatic arches
    8. temporomandibular joints
    9. mastoids
  - b. Positioning
- II. Digestive Procedures
  - a. Digestive anatomy
  - b. Patient preparation
  - c. Patient discharge instructions
  - d. Equipment and supplies
  - e. Positive vs. negative contrast
  - f. Digestive exams
  - g. Patient positioning
- III. Special Radiographic/Fluoroscopic Procedures
  - a. Urinary anatomy
  - b. Patient preparation
  - c. Patient discharge instructions
  - d. Equipment and supplies
  - e. Contrast material
  - f. Procedures:
    1. arthrography
    2. endoscopic retrograde cholangiopancreatography
    3. hysterothyrography
    4. fistulagram
    5. myelography
    6. sialography
    7. intravenous pyelograms
    8. cystography

9. t-tube cholangiograms
10. cholangiograms
11. voiding cystourethrogram
12. fistulagrams

## **Course Requirements**

### **Grading/exams:**

- I. Attendance, Dress Code, & Ethics** **2.5 points**  
 minus 0.5 points for each absence or lateness to class, clinical, or lab minus 1.0 points for a "NO-CALL"  
 Absence or lateness from three (3) or more classes or three (3) or more absences/latenesses from clinical may lower the course grade one letter unless accompanied by a physician's written reason  
 minus 0.5 points for each infraction of uniform policy,  
 minus 1.0 points for each infraction after 1st notice  
 Students must be appropriately attired to be permitted in the clinical areas.
- II. Performance Objectives** **7.5 points**  
 Papers are due on the Thursday morning following completion of rotation.
- III. Clinical Evaluations** **5 points**  
 Clinical evaluations are completed weekly by supervising clinical staff and are due on the Thursday morning following completion of rotation.
- IV. Laboratory Evaluations (Simulations & Experiments)** **5 points**  
 -0.5 points for each unprepared lab, including forgetting OWN markers for every lab and forgetting dosimeter for exposure labs
- V. Image Evaluations/PIE's** **5 points**  
 Students will be responsible for completing 2 preliminary image evaluations (PIEs) for Category I (Chest & Abdomen) and 2 examinations from Category II (Upper Extremity). The PIE average counts for 10% of the total Image/PIE grade.
- VI. Competency Evaluations** **5 points**  
 A minimum of 12 successful competency tests is required in RADT 201.
- VII. Film Critique** **5 points**  
 Students are responsible for quizzes and preparing and presenting a film critique report.
- VIII. MSRT Project** **5 points**
- \*IX. Quizzes (All quizzes are averaged except FC)** **10 points**

<b>*X. Tests (completed after each module)</b>	<b>20 points</b>
<b>XI. Final Comprehensive Exam</b>	<b>30 points</b>
	<b>100 points</b>

The ARRT has established a minimum scaled passing score of 75. The radiography program has developed standards of grading that are consistent with grading systems of other programs. Letter grades will be distributed according to the following standards:

92 - 100	A	83 - 91	B
75 - 82	C	65 - 74	D
below 65	F		

**Other Course Information**

RADT 201 is the fifth course in the sequence of radiography courses that comprise the professional portion of the radiography curriculum. It consists of both a didactic portion and a clinical portion. Students continue to build upon their knowledge of radiographic and fluoroscopic examinations. During the clinical portion of RADT 201 students will continue to achieve additional clinical skills by participating in the actual procedures performed in a radiology/medical imaging department.

Date Revised: 8/21/12