RADIOLOGIC TECHNOLOGY PROGRAM
RDT 270: SPECIAL RADIOGRAPHIC PROCEDURES
Spring 2015

COURSE DESCRIPTION:
This course includes the study of the equipment, materials and procedures for angiography, arthrography, myelography and other invasive radiographic procedures. Two lecture hours per week. Prerequisite: RDT 205 with a grade of “C” or better or permission of the department head. Corequisites: RDT 257, RDT 263 and RDT 275 or permission of the department head. Course fee: $40. Usually offered in the spring.

CREDIT HOURS:
2 credit hours (Tuesdays 11:00 am to 1:00 pm)

FACULTY:
Karie Solembrino, M.S., R.T. (R)(CT)(ARRT)
Associate Professor of Radiologic Technology

CONTACT INFORMATION:
Office AHB 307 H
Office Telephone number: (410) 572-8741
Administrative Associate: (410) 572-8740
ksolembrino@worwic.edu
Access to course instructor through Blackboard

OFFICE HOURS:
Mondays 9:00 am to 10:00 am
Thursdays 1:00 pm to 3:00 pm
Fridays 9:00 am to 11:00 am
Additional hours available by appointment

TEXTBOOK:

REFERENCES:

**COURSE OBJECTIVES:**

<table>
<thead>
<tr>
<th>Course Objectives</th>
<th>Assessment Goals</th>
<th>Assessment Strategies</th>
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| 1. Describe the circulatory system and vasculature associated with the brain, thorax, abdomen, pelvis, and extremities. (GEO 1, 3, 7) | 1. Identify the structures and components of the circulatory system.  
2. Identify the cerebral vasculature on radiographs and diagrams.  
3. Identify thoracic vasculature on radiographs and diagrams.  
4. Identify vasculature contributing to peripheral circulation. | Examinations  
Quizzes  
TurningPoint Reviews  
Electronic Information Literacy Paper  
Assignments |
| 2. Differentiate between invasive, noninvasive, and interventional medical imaging procedures. (GEO 1, 2, 3, 7) | 1. Identify and describe noninvasive procedures completed in Radiology, the equipment employed during the performance of these procedures, and the utilization of radiographic contrast for visualization of pertinent anatomical structures.  
2. Identify and describe invasive procedures completed in Radiology, the equipment employed during the performance of these procedures, and the utilization of radiographic contrast for visualization of pertinent anatomical structures.  
3. Identify and describe interventional procedures completed in Radiology, the equipment employed during the performance of these procedures, and the utilization of radiographic contrast for visualization of pertinent anatomical structures. | Examinations  
Quizzes  
TurningPoint Reviews  
Electronic Information Literacy Paper  
Assignments |
| 3. Explain how interventional procedures may be performed instead of surgery for the treatment of disease. (GEO 1, 2, 3, 7) | 1. Identify radiographic procedures which are therapeutically performed to treat acute or chronic pain.  
2. Describe the advantages of performing special radiographic procedures over surgical intervention in terms of length of hospital stay, patient recovery, and treatment of disease. | Examinations  
Quizzes  
TurningPoint Reviews  
Electronic Information Literacy Paper  
Assignments |
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| 4. Describe fluoroscopic procedures routinely performed within Medical Imaging, the Radiographer’s role assisting the Radiologist for the exam, and the radiographs completed for each procedure. (GEO 1, 2, 3, 7, 8) | 1. Explain the Myelography and Arthrography procedure in terms of equipment required, radiographs obtained, and the radiographer’s role during fluoroscopy.  
2. Explain the Hysterosalpingiography procedure in terms of equipment required, radiographs obtained, and the radiographer’s role during fluoroscopy.  
3. Explain the imaging procedures completed to evaluate the urinary system in terms of equipment required, radiographs obtained, and the radiographer’s role during fluoroscopy.  
4. Explain the imaging procedures completed to evaluate the biliary system in terms of equipment required, radiographs obtained, and the radiographer’s role during fluoroscopy.  
5. Explain the imaging procedures completed to evaluate the gastrointestinal system in terms of equipment required, radiographs obtained, and the radiographer’s role during fluoroscopy. | Examinations  
Quizzes  
TurningPoint Reviews  
Electronic Information Literacy Paper Assignments |
| 5. Explain the diagnostic reasons for the performance of special radiographic procedures. (GEO 1, 2, 3, 5, 7) | 1. Identify the purpose for completing the special imaging procedure.  
2. Identify the risks and benefits associated with the completion of the special imaging procedure.  
3. Identify the therapeutic outcome associated with the completion of the special imaging procedure. | Examinations  
Quizzes  
TurningPoint Reviews  
Electronic Information Literacy Paper Assignments |
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<tr>
<td>6. Describe the process for modifying routine radiographic exams for indications of trauma, mobile radiography, and age-specific patient needs. (GEO 1, 2, 3, 6, 7, 8)</td>
<td>1. Describe routine and alternative projections for imaging the upper extremity. 2. Describe routine and alternative projections for imaging the lower extremity. 3. Describe routine and alternative projections for imaging the pelvic and shoulder girdle. 4. Describe routine and alternative projections for imaging the vertebral column, bony calvarium, paranasal sinuses, and facial bones. 5. Describe routine and alternative projections for imaging the thoracic and abdominal cavities. 6. Identify age-specific competencies employed when completing imaging exams.</td>
<td>Examinations  Quizzes  TurningPoint Reviews  Electronic Information Literacy Paper  Assignments</td>
</tr>
<tr>
<td>7. Analyze imaging projections according to evaluation criteria for required demonstration of anatomical structures, radiographic image quality, and the presence of pathology. (GEO 1, 2, 3, 6, 7, 8)</td>
<td>1. Identify repeat radiographs according to positioning, radiographic exposure, and recorded detail errors. 2. Identify the corrective action required for positioning, radiographic exposure, and recorded detail errors.</td>
<td>Examinations  Quizzes  TurningPoint Reviews  Electronic Information Literacy Paper  Assignments</td>
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</table>
The RDT course content reflects the American Society of Radiologic Technologists (ASRT) Radiography curriculum, the American Registry of Radiologic Technologists (ARRT) Licensure examination requirements, and the master plan of education enforced by the Joint Review Committee on Education in Radiologic Sciences (JRCERT).
ACADEMIC HONESTY POLICY:
Students found exhibiting any of the following types of behavior during or in the preparation/performance of any quiz, project, report, test, or final exam will receive a zero "0" for the assignment, and the student conduct violation will be referred to the Student-Faculty Disciplinary Committee. Cheating will not be tolerated in the Radiologic Technology program. Students found cheating will be DISMISSED from the Radiologic Technology program.

A. Cheating is defined as the act of obtaining information or data improperly or by dishonest or deceitful means; and

B. Plagiarism is defined as the copying or imitating the language, ideas, or thoughts of another author and presenting them as one's original work, the copying of a theme or section from a book or magazine without giving credit in a footnote or copying from the manuscript of another student.

Sharing information present on a quiz or test are examples of academic dishonesty and will result in a grade of “F” for the course and immediate dismissal from the Radiologic Technology program.

CLASS GUIDELINES/EXPECTATIONS
1. Be punctual and arrive to class before the scheduled meeting prepared to learn.
2. Attend all class sessions in their entirety.
3. Submit only completed work. Partially completed assignments will earn a grade of 0. No late assignments will be accepted.
4. Read assigned chapters in the textbook(s) before class meetings.
5. Ask questions to the instructor and attend scheduled tutoring sessions for clarification on course content areas.

EMERGENCY INFORMATION:
In the event of a flu epidemic or other emergency that results in the suspension of classes, faculty will be communicating with students about their courses and course requirements, such as assignments, quiz and exam dates, and class and grading policies, via faculty websites or Blackboard. Students will be responsible for completing all these assignments in accordance with class policies. Information about the resumption of classes will be communicated via the College's website and email system.

RDT students are responsible for all assignments and due dates outlined in the course syllabus regardless if the college has been closed due to an emergency.

ATTENDANCE
Students are expected to attend all class sessions. If a student misses a class session, it is the student’s responsibility to acquire the information reviewed and ask questions to the course instructor during tutoring. Students absent from class will not be permitted to make-up missed quizzes or graded assessments administered during the scheduled class session.
Services for Students with Disabilities
Wor-Wic provides reasonable accommodations for students with disabilities in compliance with the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973. If you are in need of accommodations, please contact the counseling office at (410) 334-2899. For more information, see Wor-Wic’s Services for Students with Disabilities web page.

CLASS COMMUNICATION:
Blackboard is used in all RDT courses as a source of communication between instructors and students. Weekly announcements and emails will be posted in Blackboard. Students are required to use Blackboard to submit assignments and for class communication. It is the student’s responsibility to enter Blackboard daily in all RDT courses to view messages, announcements, retrieve class notes, and review materials.

BLACKBOARD:
Blackboard is used as a supplementary site for all RDT courses. To access course content in Blackboard you need to have access to a computer with an Internet connection, (other requirements may apply). Computers that meet these requirements are available on campus in MTC 200, AAB 217, HH 100, GH 204, WDC 305, and AHB 108.

Please follow these directions to access course syllabi and any other materials posted for this course:

Login Information
1. From Wor-Wic home page, point to "Quick Links" (top-right) and click the “Blackboard Login" link.

2. Enter your Wor-Wic user ID and password. Don't know your user ID or password? Contact Student Services

BLACKBOARD COMPONENTS
The following are tools the course instructor will be using in Blackboard:

Syllabus:
The posted course syllabus documents the didactic schedule, assignments, due dates, and information pertinent to the course.

Messages:
Email from the course instructor will be located under the messages section of Blackboard. Students may email the instructor and other students in the class through messages. Email is the primary method of communication between students and the course instructor outside of the classroom. Students should visit the messages section daily in the course for new information sent by the instructor.
**Course Content:**
The following items will be located within the course content of Blackboard: (1) PowerPoint Presentations, (2) Study Guides and Reviews, and (3) Assignment information. Content folders will be labeled by the dates/weeks in the semester to organize course material.

**Grades:**
Students can view grades in Blackboard. All graded assessments will be recorded into Blackboard.

**BLACKBOARD INTEGRITY**
All students logging into Blackboard affirm that they understand and agree to follow Wor-Wic Community College policies regarding academic integrity and the use of College resources as described in the college catalog. Wor-Wic Community College considers the following as violations of the computer usage policy:

1. Using the campus computing network and facilities to violate the privacy of other individuals.
2. Sharing of account passwords with friends, family members or any unauthorized individuals

Violators are subject to college disciplinary procedures.

**ARRT REVIEW ASSIGNMENTS** (GEO 1, 2, 6, 7, 8) (CO 1-7)
In the last academic semester of the RDT program, assignments are focused upon preparation for the ARRT examination. Students will complete ARRT Review Assignments. An assignment schedule will be posted in Blackboard by the beginning of the spring 2015 semester.

**ELECTRONIC/INFORMATION LITERACY WRITING ASSIGNMENT:**
(GEO 1, 2, 3, 5, 7, 8) (CO 1-7)
The student will choose an electronic journal article from the Wor-Wic Community College database for the electronic information literacy RDT 270 writing assignment. The paper should include answers to the following components: format for citations which should be included throughout the writing assignment. The rubric is provided at the end of the syllabus.

1. What specific patients are considered candidates for the selected interventional/special radiographic procedure and explain the reasons the procedure is completed for these patients.
2. What alternative surgical or imaging procedures could be completed instead of the described interventional/special procedure identified?
3. What are the risks associated with the completion of the interventional/special procedure identified? What is the anticipated therapeutic outcome associated with the procedure?
4. After reviewing the article, what do you anticipate are challenges for the physician and the Radiologic Technologist completing the procedure?
5. Explain three specific lessons from reviewing the selected article.

The following are considered appropriate topics for the RDT 270 Writing Assignment:
1. Dialysis Catheters
2. Central Line placement
3. Fistula repairs
4. Biopsies
5. Port placement
6. Epidurals
7. Nerve Blocks

The Electronic/Information Literacy writing assignment is Due Sunday March 22, 2014 by 11:59 pm EST in Blackboard through the assignment link. NO LATE PAPERS WILL BE ACCEPTED. FAILURE TO SUBMIT THE PAPER BY March 22, 2015 at 11:59 pm EST WILL EARN A 0.

The Electronic/Information Literacy assignment is a college requirement. Students who fail to submit the paper or do not submit by the due date will receive a 0 for the assignment.

If you wish to have additional help on an essay, you may schedule an appointment with a writing conference instructor by going to www.worwic.edu and clicking on “Current Students” and then “Learning Resources” and “Writing Conferences.” Limited time slots are available, so an appointment is required. If you cannot keep your appointment, it is your responsibility to cancel any writing conferences by using this link. Writing Conferences are located in AAB 216. Writing Conferences hours are posted on the college website.

Students are required to submit the electronic information literacy assignment in a digital format through blackboard. The paper must be submitted in a Microsoft Word compatible document. Papers will not be accepted in hard copy form.

**QUIZZES** (GEO 1, 2, 3, 4, 5, 7, 8) (CO 1-6)
Quizzes will be administered throughout the semester to measure the student’s comprehensive knowledge of course concepts. Students will complete quizzes during scheduled class sessions. Spelling counts. Terms spelled incorrectly will be marked wrong. Students should anticipate quizzes every class session. Quizzes in this course will focus upon Special Radiographic Procedures and Radiographic Positioning. NO MAKE-UP QUIZZES WILL BE ADMINISTERED. A GRADE OF 0 IS EARNED FOR STUDENTS ABSENT DURING A QUIZ.
TESTS: (GEO 1, 2, 3, 4, 5, 7, 8) (CO 1-7)
Three tests will be administered in RDT 270. Study guides will be provided for all chapter tests. Students are required to learn the spelling for each anatomical structure reviewed. Misspelled terms will be marked incorrectly on tests. NO MAKE-UP TESTS WILL BE ADMINISTERED.

COMPREHENSIVE FINAL EXAMINATION: (GEO 1, 2, 3, 4, 5, 7, 8) (CO 1-10)
The comprehensive final examination will cover all course content reviewed throughout the semester. Students are required to learn the spelling for each anatomical structure reviewed. Misspelled terms will be marked incorrectly on the comprehensive final. NO MAKE-UP FINAL WILL BE ADMINISTERED.

COURSE EVALUATION:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Grade</th>
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<tbody>
<tr>
<td>Electronic Information Literacy Paper</td>
<td>5%</td>
<td>A 93-100 Excellent</td>
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<tr>
<td>ARRT Review Assignments/Quizzes</td>
<td>15%</td>
<td>B 84-92 Good</td>
</tr>
<tr>
<td>Tests</td>
<td>30%</td>
<td>C 75-83 Average</td>
</tr>
<tr>
<td>Comprehensive Final Examination</td>
<td>50%</td>
<td>D 66-74 Poor</td>
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<td></td>
<td></td>
<td>F 0-65 Failing</td>
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</tbody>
</table>

GRADING SCALE:

A FINAL GRADE BELOW A 75.0% RESULTS IN COURSE FAILURE AND DISMISSAL FROM THE RADIOLOGIC TECHNOLOGY PROGRAM. GRADES ARE NOT ROUNDED. A FINAL GRADE OF 74.9% WILL RESULT IN COURSE FAILURE AND DISMISSAL FROM THE RADIOLOGIC TECHNOLOGY PROGRAM.
<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>20</td>
<td>Myelogram, Arthrogram, HSG, LP, Sialography</td>
</tr>
<tr>
<td>March</td>
<td>10</td>
<td>Radiographic Positioning Review</td>
</tr>
<tr>
<td>February</td>
<td>3</td>
<td>Urinary Imaging Procedures</td>
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<tr>
<td>March</td>
<td>3</td>
<td>Blood Supply Thorax and Abdomen</td>
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<tr>
<td></td>
<td>17</td>
<td>TEST ONE</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>Equipment, Needles, Catheters, and Guidewires</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Circulatory System, Lymphatic System, Vasculature</td>
</tr>
<tr>
<td>March</td>
<td>10</td>
<td>SPRING BREAK</td>
</tr>
<tr>
<td>March</td>
<td>17</td>
<td>Blood supply Brain and Extremities</td>
</tr>
<tr>
<td>March</td>
<td>24</td>
<td>Special Procedures Thorax/Abdomen/Pelvis</td>
</tr>
<tr>
<td>March</td>
<td>31</td>
<td>TEST TWO</td>
</tr>
<tr>
<td>April</td>
<td>7</td>
<td>Mobile/Trauma/Alternate Projections/Image Analysis</td>
</tr>
<tr>
<td>April</td>
<td>14</td>
<td>Mobile/Trauma/Alternate Projections/Image Analysis</td>
</tr>
<tr>
<td>March</td>
<td>29</td>
<td>RDT 270 COMPREHENSIVE FINAL</td>
</tr>
</tbody>
</table>
RDT 270 Electronic Information Literacy Writing Assignment Grading Rubric

<table>
<thead>
<tr>
<th>Criteria (35 Total Points)</th>
<th>0 Non-performance</th>
<th>3 Basic</th>
<th>5 Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spelling</strong></td>
<td>More than three spelling errors are present throughout the paper.</td>
<td>No more than three spelling errors are present.</td>
<td>Paper is free of spelling errors.</td>
</tr>
<tr>
<td><strong>Grammar/Sentence Structure</strong></td>
<td>Does not demonstrate coherent sentence structure or knowledge of grammatical rules as expressed in the English Language.</td>
<td>No more than three Grammatical or Sentence structure errors are noted.</td>
<td>Paper is free of grammatical and sentence structure errors. Language is concise and easily understood by the reader.</td>
</tr>
<tr>
<td><strong>Summary of Article</strong></td>
<td>The writing assignment contains less than ten substantive sentences summarizing the article and/or the student fails to summarize the article using their own words.</td>
<td>The student summarizes the article with ten to fourteen substantive sentences using their own words.</td>
<td>The student summarizes the article using their own words with a minimum of fifteen substantive sentences and a maximum of twenty sentences.</td>
</tr>
<tr>
<td><strong>Content Questions about the Article</strong></td>
<td>The student answers less than three questions in complete sentences and/or the student fails to use own words to describe article content.</td>
<td>The student answers three questions pertaining to the published article in complete sentences and using their own words.</td>
<td>The student completely answers four questions pertaining to the published article in complete sentences and using their own words.</td>
</tr>
<tr>
<td><strong>Describes lessons learned.</strong></td>
<td>Does not describe lessons learned.</td>
<td>Explains three specific lessons learned.</td>
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<tr>
<td><strong>Completes research in professional organization website</strong></td>
<td>Does not provide reference in APA format.</td>
<td>Uses the WWCC database to locate selected article.</td>
<td></td>
</tr>
<tr>
<td><strong>Paper Components</strong></td>
<td>The writing assignment template is not used appropriately by the student.</td>
<td>Writing assignment is completed using the supplied template.</td>
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</tbody>
</table>