COURSE OUTLINE

Course Number       Course Title               Credits
RAD 242             Advanced Clinical Experience II       2

Hours: Pre-requisites:
28 clinical days    RAD 240, RAD220, RAD224

Catalog description (2016-2017 Catalog):
Continuation of RAD 240 Advanced Clinical Experience I. Students continue to enhance proficiency in all aspects of radiologic technology in cooperation with area hospitals. Students perform diagnostic radiographic examinations on a variety of patients. In this final phase of the clinical competency process, remaining competency evaluations test student ability with respect to skills expected of entry-level radiographers.

Required texts/other materials:
Title: Textbook of Radiographic Positioning and Related Anatomy
Author: K. Bontrager
Publisher: Elsevier Mosby
Edition: Eighth

Revision date/No Course Changes: Course Coordinator:
Spring 2017
Sandra L. Kerr, 609-570-3337, e-mail: kerrs@mccc.edu
Course Competencies/Goals:
Upon completion of this course the student will be able to:
1. Develop the technical competence to perform all types of diagnostic imaging procedures on a variety of patient types using a variety of imaging equipment and processing modes.
2. Demonstrate prudent judgment in administering ionizing radiation to produce diagnostic images.
3. Focus on providing optimum patient care in a society that is becoming increasingly diverse and experiencing generational, cultural and ethnic shifts.
4. Perfect the ability to work with others in a team relationship.
5. Sharpen the understanding of the intricacies associated with providing direct patient care in today’s health care setting as a student and radiographer.
6. Demonstrate CPR proficiency by completing certification requirements.
7. Perform trauma and non-routine radiographic procedures during an off-hour assignment with the appropriate level of supervision.

Course-specific General Education Knowledge Goals and Core Skills.

General Education Knowledge Goals
Goal 1. Communication. Students will communicate effectively in both speech and writing.
Goal 4. Technology. Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.
Goal 8. Diversity. Students will understand the importance of a global perspective and culturally diverse peoples.

MCCC Core Skills
Goal A. Written and Oral Communication in English. Students will communicate effectively in speech and writing, and demonstrate proficiency in reading.
Goal B. Critical Thinking and Problem-solving. Students will use critical thinking and problem solving skills in analyzing information.
Goal C. Ethical Decision-Making. Students will recognize, analyze and assess ethical issues and situations.
Goal E. Computer Literacy. Students will use computers to access, analyze or present information, solve problems, and communicate with others.
Goal F. Collaboration and Cooperation. Students will develop the interpersonal skills required for effective performance in group situations.
Goal G. Intra-Cultural and Inter-Cultural Responsibility. Students will demonstrate an awareness of the responsibilities of intelligent citizenship in a diverse and pluralistic society, and will demonstrate cultural, global, and environmental awareness.
Upon completion of the 28 day clinical experience, the student will be able to:

- Exercise the priorities required in daily clinical practice. (CG 5, GE B)
- Execute medical imaging procedures under the appropriate level of supervision. (CG 5)
- Adhere to team practice concepts that focus on organizational theories, roles of team members and conflict resolution. (CG 4, GE F)
- Adapt to changes and varying clinical situations. (CG 1, 7, GE B)
- Provide patient-centered clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity or culture. (CG 3, GE 8, G)
- Integrate the use of appropriate and effective written, oral and nonverbal communication with patients, the public and members of the health care team in the clinical setting. (CG 1, GE 1, A)
- Integrate appropriate personal and professional values into clinical practice. (CG 5, GE 9, C)
- Recognize the influence of professional values on patient care. (CG 5, GE 9, 5)
- Provide desired psychosocial support to the patient and family. (CG 5, GE 5)
- Demonstrate competent assessment skills through effective management of the patient’s physical and mental status. (CG 1,GE 1, A)
- Respond appropriately to medical emergencies. (CG 1, 6, GE B)
- Adapt procedures to meet age-specific, disease-specific and cultural needs of patients. (CG 1, GE 9, C)
- Assess the patient and record clinical history. (CG 1, GE 1, A)
- Demonstrate basic life support procedures. (CG 6, GE B)
- Use appropriate charting methods. (CG 1, GE1, A)
- Apply standard and transmission-based precautions. (CG 1)
- Apply the appropriate medical asepsis and sterile technique. (CG 1)
- Demonstrate competency in the principles of radiation protection standards. (CG 2)
- Report equipment malfunctions. (CG 1)
- Examine procedure orders for accuracy and make corrective actions when applicable. (CG 1)
- Demonstrate safe, ethical and legal practices. (CG 5, GE 9)
- Integrate the radiographer’s practice standards into clinical practice setting. (CG 5, GE 9, C)
- Maintain patient confidentiality standards and meet HIPAA requirements. (CG 1, GE 9, C)
- Demonstrate the principles of transferring, positioning and immobilizing patients. (CG 1)
- Differentiate between emergency and non-emergency procedures. (CG 1)
- Adhere to national, institutional and departmental standards, policies and procedures regarding care of patients, providing radiologic procedures and reducing medical errors. (CG5)
- Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible. (CG 2)
- Critique images for appropriate anatomy, image quality and patient identification. (CG 1, GE 4, B, E)
- Determine corrective measures to improve inadequate images. (CG 1, GE 4, B, E)
**Evaluation of student learning:**

There will be one (1) Clinical Progress Evaluation – to be conducted at the end of the 28-day clinical course – which will cover the student’s overall technical and professional development. Students will be evaluated weekly by the staff they are assigned to which becomes the basis of the Clinical Progress Evaluation. An off-hour rotation evaluation will be completed by the clinical instructor or supervising technologist. Students must submit the evaluation form to the senior clinical instructor upon return to the usual daytime assignment. A copy must be submitted to the program coordinator.

Students are required to satisfactorily complete all remaining initial clinical competency evaluations (CCEs) as outlined in the General Course Objectives. Provided that the student has followed the recommended completion schedule, the following procedures should be completed prior to graduation:

- Eight (8) radiographic procedures identified in the Clinical Education Student Handbook as elective procedures. Elective procedures are those that will provide student with a well-rounded clinical experience and many consist of procedures that are performed with relative frequency in radiology departments.

- Three (3) continual competency evaluations as identified in the Clinical Education Student Handbook.

- One (1) terminal competency taken from among those listed in the Clinical Education Student Handbook. The clinical instructor shall determine the terminal competency evaluation that shall be completed.

Clinical competency evaluations must be submitted to the Clinical Coordinator within one week of the date the procedure was completed. Any CCE evaluation form submitted after one week will not be accepted; the procedure will need to be repeated.

**The clinical grade is computed as follows:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Clinical Competency Evaluations</td>
<td>30%</td>
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<tr>
<td>Clinical Progress Evaluation</td>
<td>30%</td>
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<tr>
<td>Digital Imaging Exam</td>
<td>25%</td>
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<tr>
<td>Off-Hour Clinical Evaluation</td>
<td>15%</td>
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CPR certification for the healthcare provider valid through July 5 of current year is required to take the ARRT Examination. A copy of the current certification card must be on file by 6/29/17.
DIGITAL IMAGING EXAMINATION GUIDELINES:
1. Modules are available for download at https://mccc.blackboard.com/ Link to Mercer Online http://www.mccc.edu/programs_tvc.shtml for information regarding log in and other frequently asked questions.

2. Read all the modules, complete the activities, take comprehensive notes, and study to be prepared for the comprehensive examination.

3. The take home multiple choice examination is due by **Friday 6/9/17, 5:00PM**.

4. Following are the Digital Imaging Exam Content Specifications:

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<tr>
<th>TOPIC</th>
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<tbody>
<tr>
<td>Module 1: Fundamentals</td>
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<td>Module 2: Processing</td>
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<td>Module 3: Display</td>
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<td>Module 4: Image Analysis</td>
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<td>Module 5: PACS</td>
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<td>Module 6: Dose Reduction and Patient Safety</td>
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<td>Module 7: Quality</td>
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<td>TOTAL</td>
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Clinical Assignment Schedule:

During this 28-day course, students will report to the assigned clinical facility Mondays through Fridays prepared to begin clinical education at 8:00 A.M. until 4:00 P.M. The clinical rotation will include evening weekday hours 12:00 P.M. - 8:00 P.M.; the total clinical education assignment will not exceed 37.5 hours. Details regarding the schedule and evaluation instruments will be provided by the faculty member.

Note: Students who demonstrate competency in any procedure may perform that procedure under indirect supervision. This means that the licensed radiographer need not be present in the radiographic room during the procedure, but must be adjacent to the room and immediately available should the student require assistance.

Students who produce unacceptable radiographs must repeat those radiographs under direct supervision regardless of the student’s level of competency. Failure to comply with this rule is subject to disciplinary action.

Clinical Education Policies:
The student should refer to the clinical education handbook for the pertinent policies regarding attendance, punctuality, CCEs, etc. Please note that cellular phones are not to be used in any clinical education facility as these can interfere with unshielded medical devices such as cardiac pacemakers.

Academic Integrity Statement:
Mercer County Community College is committed to Academic Integrity -- the honest, fair and continuing pursuit of knowledge, free from fraud or deception. Academic Integrity is violated whenever a student:
A. Uses or obtains unauthorized assistance in any academic work.
B. Gives fraudulent assistance to another student.
C. Knowingly represents the work of others as his/her own, or represents previously completed academic work as current.
D. Fabricates data in support of an academic assignment.
E. Inappropriately or unethically uses technological means to gain academic advantage.
In all cases, the instructor shall notify the Chair of the Academic Integrity Committee of the violation. Students should refer to the MCCC Student Handbook for the complete policy. Students may be required to be report violations of Academic Integrity to the American Registry of Radiologic Technologists.
Mercer County Community College
Radiography Program
Clinical Education Dates - Class 2017
Course: RAD 242    Semester: Summer 2017
Hours: 8:00AM - 4:00PM

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Memorial Day Holiday: May 29
Kettering Review Seminar: 6/1 - 6/2
End-Term Evaluation Due: June 29
NOTE: 12:30 PM Dismissal - Students hand-deliver all required evaluation forms and dosimeter to Mrs. Kerr (MS150) by 1:00 PM
Program Completion Letters Available: July 5, 9:00AM - Noon (MS150)
COURSE: Advanced Clinical Experience II (RAD 242)  SEMESTER: Summer 2017

**Off-Hour Clinical Rotation Assignment**

**Weekdays: Monday – Friday**  
**12:00 PM – 8:00 PM**

<table>
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<th>WEEK OF:</th>
<th>Evaluation Form Due By</th>
<th>Student</th>
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</table>
| MAY 22 – MAY 26   | June 2                 | Katarzyna Gawrys Mighton Champion Zachary Bourdeau Carlos Molina Bradi Houx Israel Lopez Johanna Cando | Capital Regional Medical Center  
                      Capital Health System Hopewell  
                      Centra State Medical Center  
                      Hunterdon Medical Center  
                      RWJUH at Hamilton  
                      RWJUH at Hamilton  
                      UMCP Plainsboro |
| JUNE 5 - JUNE 9   | June 16                | Dustin Hodge Timothy Scabarozi Patricia Bradley Tyrone Greenfield Elizabeth Pierson Jonathan Case | Capital Regional Medical Center  
                      Capital Health System Hopewell  
                      Centra State Medical Center  
                      Hunterdon Medical Center  
                      RWJUH at Hamilton  
                      UMCP Plainsboro |
| JUNE 12 - JUNE 16 | June 23                | Allison Mullarney Halyna Yaschyshyn  
                      Sean Evert Tracey Quinn  
                      Jacqueline Ortolano | Capital Regional Medical Center  
                      Capital Health System Hopewell  
                      Centra State Medical Center  
                      Hunterdon Medical Center  
                      RWJUH at Hamilton  
                      UMCP Plainsboro |
| JUNE 19 – JUNE 23 | June 29                | Whitney Henry Nicole Toledo                  | RWJUH at Hamilton  
                      UMCP Plainsboro |

Off-Hours Clinical Instructors:  
Centra State Medical Center: Beth Ann Foulks  
Capital Health System - Hopewell: Cara Maiuro  
Capital Regional Medical Center: June Kriegner  
Hunterdon Medical Center: Mary Schaal  
Robert Wood Johnson University Hospital at Hamilton: Jessica Morris, Gregory Blasse, Sapna Shah  
University Medical Center Princeton at Plainsboro: Jason Collins, Chris Adams
# MERCER COUNTY COMMUNITY COLLEGE

## HEALTH PROFESSIONS DIVISION

### RADIOGRAPHY PROGRAM 2ND YEAR STUDENT OFF-HOUR ASSIGNMENT EVALUATION

| STUDENT: ____________________________ | RADIOGRAPHER: ____________________________ |
| DATE: ____________________________ | EVENING |

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**SCORING KEY:**
- 3 = ACCEPTABLE: Student consistently meets stated objective
- 2 = MINOR IMPROVEMENT NEEDED: Student usually meets stated objective
- 1 = MAJOR IMPROVEMENT NEEDED: Student inconsistently meets stated objective
- 0 = UNACCEPTABLE: Student rarely or does not meet stated objective

**TO THE SUPERVISING CLINICAL INSTRUCTOR:**
In accordance with the goals and objectives unique to clinical education on evenings, please indicate agreement or disagreement and comment in the spaces provided regarding the following:

<table>
<thead>
<tr>
<th>THE STUDENT:</th>
<th>AGREE (✓)</th>
<th>DISAGREE (✗)</th>
<th>COMMENT</th>
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<tbody>
<tr>
<td>Functions as an effective member of the healthcare team</td>
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<td>Provides effective care to the trauma patient</td>
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<td>Analyzes and troubleshoots problems in obtaining diagnostic images of trauma patients</td>
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<td>Exercises responsibility and independent judgment within the confines of indirect supervision.</td>
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**CLINICAL INSTRUCTOR SIGNATURE** ____________________________ **DATE** ____________________________

**STUDENT SIGNATURE** ____________________________ **DATE** ____________________________
OFF-HOUR ROOM ASSIGNMENT EVALUATION: SECOND-YEAR STUDENT

The second-year radiography student shall be able to:

1. Speak with patients in a courteous, audible tone of voice. Clearly explain examination procedures to patients. Demonstrate effective communication with staff within the health care facility.

2. Ensure the physical and emotional well-being of patients in his/her care during radiographic procedures.

3. Assist the technologist in maintaining the radiographic room in a clean and orderly condition. Assist in the restocking of radiographic room supplies as required to maintain same in a ready condition.

4. Correctly utilize locks and devices necessary to position the radiographic tube and bucky into proper alignment. Properly set all necessary controls on the x-ray control panel.

5. Position the patient correctly for radiographic procedures learned in the didactic and laboratory components of the curriculum (subject to department protocol). Adapt knowledge and skills to unique or challenging patient circumstances (e.g., as when patients are severely injured). Provide evidence of successful completion of laboratory testing.

6. Select the appropriate kVp, mA, and time for radiographic procedures learned in the didactic and laboratory components of the curriculum, subject to department protocol.

7. Restrict the radiation field to the size of the anatomical part(s) of interest.

8. Utilize gonadal shielding as appropriate for the radiographic procedure.

9. Work with radiography staff members for the benefit of patients. Provide assistance when requested.

10. Demonstrate energy and enthusiasm in the performance of radiographic procedures and related tasks. Volunteer to actively participate in clinical education activities. Make satisfactory progress in the completion of competency objectives.

11. Abide by the rules and regulations of the MCCC radiography program and clinical education center.

12. Wear professional attire as designated by MCCC to include film badge, name tag and college patches. The name tag must clearly identify the bearer as a student. Have immediately available the Student Handbook, and pocket positioning manual.

13. Perform radiographic procedures in an expeditious, efficient manner without compromising patient care or safety.

14. Attend clinical education on all assigned days in assigned room (see rotation schedule to verify assignment).

15. Arrive at the designated time to the clinical education center. Report to the assigned radiographic area promptly upon arrival at the clinic and following assigned breaks.