

***MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS, AND NURSING DIVISION
RADIOGRAPHY PROGRAM***



**CLINICAL EDUCATION
STUDENT HANDBOOK
CLASS OF 2027**

Revised: 7/18/2026

MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM TABLE OF CONTENT

TO THE STUDENTS	3
RADIOGRAPHY PROGRAM MISSION AND GOALS	4
CENTER FOR INCLUSION, TRANSITION, & ACCESSIBILITY	5
RADIOGRAPHY A.A.S. DEGREE	6-7
TIMETABLE FOR COMPLETION OF RADIOLOGY CURRICULUM	8
BLS CERTIFICATION	9
GENERAL GRADING POLICY	10
STUDENT CONDUCT CODE (FROM MCCC OMB 501B)	11
SUSPENSION / EXPULSION POLICY	14
PREGNANCY POLICY	15
CLINICAL EDUCATION AND EVALUATION	16-17
HEALTH RECORD	18
ELIGIBILITY FOR CLINICAL EDUCATION	19
CRIMINAL BACKGROUND CHECKS	20
CLINICAL EDUCATION ASSIGNMENTS	20
CLINICAL EDUCATION POLICIES	22
SOCIAL MEDIA POLICY	27
RADIATION PROTECTION AND MONITORING	28
LOST OR DAMAGED RADIATION DOSIMETER REPORT	29
STUDENT SAFETY IN MAGNETIC RESONANCE IMAGING	31
DISCIPLINARY POLICY	33
DUE PROCESS AND GRIEVANCE PROCEDURE	34
PATIENT CONFIDENTIALITY	35
INFECTION CONTROL	36
INJURIES SUSTAINED DURING CLINICAL EDUCATION	37
ESSENTIAL FUNCTIONS	38
CLINICAL COMPETENCY PROCESS (GENERAL REQUIREMENTS)	40
CLINICAL COMPETENCY (SPECIFIC REQUIREMENTS)	42
CLINICAL COMPETENCY TRIALS COMPLETION CHECKLIST	48
RULES FOR COMPLETION OF CLINICAL COMPETENCY EVALUATIONS	57
COMPETENCY EVALUATION FORM	58
CLINICAL COMPETENCY EVALUATION – OPERATING ROOM	62
CLINICAL COMPETENCY REMEDIATION COMPLETION FORM	64
RADIOGRAPHY EXAM POLICY	65
RADIOGRAPHY STUDENTS AS HEALTH CARE EMPLOYEES	67
IMPORTANCE OF LICENSING IN RADIOLOGIC TECHNOLOGY	68
ETHICS DISCLOSURE REQUIREMENT	68
STUDENT’S RIGHT TO PRIVACY	69
VOLUNTARY REFERENCE AUTHORIZATION	70
PROGRAMMATIC ACCREDITATION	71
HEALTH PROFESSIONS PROGRAM POLICIES	74
◦ <i>Background Check Procedure</i> ◦ <i>Student Impairment and Medical Emergency Procedure</i> ◦ <i>Student Standards of Conduct</i>	

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

TO THE STUDENT

This Student Handbook was prepared for your reference and use. It contains the current policies and procedures related to clinical education and will serve to guide your activities as you complete radiography schooling. It will also serve as your record of clinical achievement as evidenced by the list of radiographic procedures completed at your assigned clinical education centers. Accordingly, this Handbook is posted on Trajecsys and should be in your possession during clinical education.

As a student enrolled in the Mercer County Community College Radiography Program, you will be responsible for observing all college rules and regulations as stated in the current College Catalog, Student Handbook, and college website. In addition, you are responsible for observing rules and regulations at your assigned clinical education centers. Clinical facilities, although separated physically from the college, are an integral part of the student's educational experience and should be viewed as extensions of the college community.

The Clinical Education Student Handbook represents a contract between Mercer County Community College and the student radiographer. Willful disregard for the policies and procedures contained therein is cause for disciplinary action. Every radiography student is expected to exercise maturity and sound judgment by complying with both college-wide and clinical education policies and procedures.

The Radiography Program reserves the right to change current Clinical Education Student Handbook policies and procedures as needed without advance notice. All changes and additions to the Clinical Education Student Handbook are binding on all radiography students.

It is our hope that each radiography student will utilize all resources available to him or her, including this Clinical Education Student Handbook, in the pursuit of professional excellence.

Sincerely,

Sandra L. Kerr, M.A., R.T. (R) (M)
Radiography Program Coordinator

Deborah Greer M.Ed., R.T. (R) (M)
Radiography Clinical Coordinator

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

MISSION AND GOALS

Mission Statement:

The Radiography Program sponsored by Mercer County Community College welcomes a diverse student population of all ages from a wide variety of backgrounds, abilities, interests, levels of education, and economic circumstances to a challenging and supportive environment. Faculty and clinical affiliate personnel work collaboratively to ensure student success, and offer the best college education and learning experience possible to qualified men and women. In addition, to prepare and graduate caring, professional, and knowledgeable radiographers for entry level positions while encouraging life-long learning.

Goals:

GOAL 1: Students will apply the essential skills to perform diagnostic radiographic procedures competently and professionally as entry level radiographers.

Student Learning Outcomes:

Students will employ correct positioning skills

Students will select technical factors to produce diagnostic quality images

Students will correctly apply radiation safety principles
Students will accurately apply patient care principles

GOAL 2: Students will communicate effectively in a health care facility.

Student Learning Outcomes:

Students will employ appropriate communication skills with patients and staff

Students will clearly convey concepts and ideas through oral and written communications

GOAL 3: Students will apply effective critical thinking skills.

Student Learning Outcomes:

Students will modify imaging procedures to accommodate non-routine patients

Students will analyze images and identify corrective measures to improve the quality

GOAL 4: Students will exercise values and attitudes consistent with professional practice.

Student Learning Outcomes:

Students will demonstrate professionalism and integrate into clinical practice

Students will exhibit professional ethics and values consistent with clinical practice.

CENTER FOR INCLUSION, TRANSITION, & ACCESSIBILITY

All college programs are open to qualified individuals who, with reasonable accommodations, meet the academic and technical standards of a program of study. For information on Universal Design for Learning, information regarding the needs of students with disabilities, or information regarding the provision of academic accommodations, please visit:

The Center for Inclusion, Transition and Accessibility https://www.mccc.edu/student_services_needs.shtml

Room LB 216

609.570.3422

Contact: Arlene Stinson, stinsona@mccc.edu

Lisa Ward, wardl@mccc.edu

Susan Onaitis, onaitiss@mccc.edu

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

RADIOGRAPHY ASSOCIATE IN APPLIED SCIENCE DEGREE

The radiography program combines courses in general education and radiography with supervised clinical experience in area hospitals. Graduates are eligible to take the American Registry of Radiologic Technologists examination in radiography in order to become nationally certified and licensed by the State of New Jersey.

The program is accredited by the Joint Review Committee on Education in Radiologic Technology, *20 North Wacker Drive, Suite 2850, Chicago, Illinois 60606-3182; 312-704-5300; www.jrcert.org*, and the NJ Radiologic Technology Board of Examiners www.state.nj.us/dep/rpp/. Graduates are employed by hospitals, clinics, diagnostic imaging centers and the offices of private physicians.

Upon completion of the program, graduates are awarded the Associate in Applied Science degree and will be prepared to:

- Apply the essential skills to perform diagnostic radiographic procedures competently and professionally as entry level radiographers
- Communicate effectively in a health care facility.
- Apply effective critical thinking skills.
- Exercise values and attitudes consistent with professional practice.

Radiography
Associate in Applied Science Degree

PRE-PROFESSIONAL PHASE FIRST SEMESTER	
BIO 103 Anatomy and Physiology I (3/3)	4
ENG 101 English Composition I (3/0)	3
MAT 125 Elementary Statistics I (3/0)	3
PSY 101 Introduction to Psychology (3/0)	3
PRE-PROFESSIONAL PHASE SECOND SEMESTER	
BIO 104 Anatomy and Physiology II (3/3)	4
ENG 102 English Composition II (3/0)	3
PHY 109 Fundamentals of Physics (2/2)	3
— — General Education elective *	3
PROFESSIONAL PHASE	
FIRST SEMESTER (Fall)	
RAD 102 Introduction to Radiography and Patient Care (1/2)	2
RAD 119 Principles of Imaging Science I (2/0)	2
RAD 127 Radiographic Procedures I (3/3/210 hours)	6
SECOND SEMESTER (Spring)	
RAD 120 Principles of Imaging Science II (2/2)	3
RAD 128 Radiographic Procedures II (2/3/225 hours)	6
SUMMER SESSION	
RAD 117 Radiation Protection and Biology (2/0)	2
RAD 207 Clinical Experience Practicum (0/0/225 hours)	2
THIRD SEMESTER (Fall)	
RAD 217 Advanced Imaging Modalities (3/0)	3
RAD 228 Radiographic Procedures III (2/3/340 hours)	7
FOURTH SEMESTER (Spring)	
RAD 224 Introduction to Pathology (2/0)	2
RAD 232 Imaging Equipment and Radiography Seminar (3/2)	4
RAD 240 Advanced Clinical Experience I (0/0/340 hours)	3
SUMMER SESSION	
RAD 242 Advanced Clinical Experience II (0/0/225 hours)	2
Total Credits	70
NOTE: RAD 127, 128, and 228 require 15-30 minutes each week for competency testing in the laboratory. *Select PHI 204 or 205, or course from Diversity and Global Perspective general education category. NOTE: Students must earn a minimum grade of C+ in BIO 103 and 104, PHY109, MAT125, and all RAD courses. A minimum grade of C is required in all other general education courses.	

TIMETABLE FOR COMPLETION OF THE PROFESSIONAL PHASE OF THE RADIOGRAPHY CURRICULUM

In order to make radiography education meaningful and ensure timely preparation for entry-level employment, licensing and certification, radiography students are advised that from the time they begin radiography courses, they will have three (3) years to complete all remaining radiography courses. For example, from the time students begin their first radiography courses in fall 2023, they will have until summer 2026 to complete all Radiography (RAD) courses. Students who fail to complete all radiography course requirements within the three-year window will not be allowed to continue in the professional phase of the Radiography Curriculum.

The following policies also apply:

1. Students will be dismissed from the radiography program if they fail the same radiography course more than once or failed more than two radiography courses at any point within the professional phase of the curriculum.
2. Students who do not receive a passing grade (C+ or higher) in any radiography course cannot continue taking radiography courses and must withdraw from the professional phase of the Radiography Curriculum. Radiography courses may be retaken only once provided that other conditions are met (see bullet #3).

Re-entry into the professional phase of the Radiography Curriculum is contingent upon:

- Not having failed the same radiography course(s) more than once
 - Not having failed more than two radiography courses at any point during the professional phase of the curriculum
 - Maintenance of matriculation as a radiography major and acceptable grade-point average (Cumulative MCCC GPA ≥ 2.5)
 - Currency of mathematics and science courses at start of re-entry semester
 - Meeting all admission requirements of the returning class cohort
 - Auditing the co-requisite radiography courses (lecture/laboratory components only)
3. Students must meet the following re-entry requirements:
 - ☐ Submit of a typewritten and signed letter addressed to the Radiography Program Coordinator requesting permission to re-enter the professional phase of the curriculum within two weeks of initial course failure
 - ☐ Schedule a meeting with the Math, Science & Health Professions Success Coach within four weeks of initial course failure to develop a success action plan
 - ☐ Submit success action plan to the Radiography Program Coordinator within two weeks following the meeting with the Success Coach
 - ☐ Schedule a meeting with the Radiography Program Coordinator to review the success action plan and review the re-entry requirements at least seven weeks prior to the start of the re-entry semester
 - ☐ Available space to re-admit students is based on the current pool of qualified first-time applicants and clinical capacity of the semester returning
 - ☐ If the number of re-admit students exceeds the clinical capacity, the MCCC cumulative GPA will be utilized to determine ranking for readmission
 4. The three-year completion window described previously applies even if a student must withdraw from the Program on account of not passing a Radiography course in a given semester or term. The clock stops only when a student is granted a leave of absence by the Radiography Program Coordinator and only for the period specified in the documentation. Except in matters of pregnancy approval of any leave of absence will be made on a case-by-case basis.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

AMERICAN HEART ASSOCIATION CPR CERTIFICATION

Students are required to document current American Heart Association Basic Life Support CPR (Cardiopulmonary resuscitation) and AED (automated external defibrillator) designed for the Healthcare Professional certification through July of their graduation year. CPR is one of many competencies required by the American Registry of Radiologic Technologists in order to be eligible to sit for certification exam in radiography.

Following options are available to achieve CPR certification for the healthcare professional:

Local area hospitals including Radiography Program clinical education sites offer the **American Heart Association Basic Life Support for the Healthcare Provider** program at various times of the year. There may also be offerings on MCCC campus depending on time frame required.

GENERAL GRADING POLICY

The general grading policy regarding final grades as outlined in the college catalog will be followed in the radiography program. Grades submitted to the registrar's office will be as indicated below. A student must earn a C+ grade (77%) in all Radiography courses before s/he can advance to the next Radiography course.

The following guidelines will be used in computing final grades in radiography-specific courses:

- Decimals will be used in the calculation of averages. Decimals will not be converted to the next whole number until the determination of the final grade.
- Numerical value will be utilized for all computations until the determination of the final course grade. The final course grade will be converted to a letter equivalent according to the following scale:

A	=	93 to 100
A-	=	90 to 92
B+	=	87 to 89
B	=	83 to 86
B-	=	80 to 82
C+	=	77 to 79
C	=	70 to 76
D	=	60 to 69
F	=	0 to 59

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

STUDENT CONDUCT CODE (FROM MCCC OMB 501B)

Reason for Policy

To maintain a campus environment that is conducive to learning, protects the College's educational purposes, maintains reasonable order on campus, and protects the rights of all members of the college community.

Policy Statement

Students enrolling in the College assume an obligation to conduct themselves in a manner compatible with the College's function as an educational institution and suitable to members of the academic community. This obligation extends to conduct on either college campus or at any other location as part of any college sponsored activity.

Prohibited Conduct

An individual, a group of individuals, or a student organization may be charged with any of the violations under this Code. In cases where a violation is committed by an individual member of a student group or organization, the entire group or organization may be held responsible, in addition to the individual member, when those members not directly involved participated in the activity by encouraging, witnessing or condoning the act in any manner.

The following conduct shall be subject to disciplinary action:

Academic Dishonesty (See [OMB 210.](#))

Alcohol Violations (See [OMB 651.](#))

- Possession, consumption, dispensing, selling, or supplying of alcoholic beverages on property that is owned, operated, or maintained by the College, or at any other location as part of any college-sponsored activity.

Computer Misuse (See also [OMB 942.](#))

- Unauthorized access, entry or use of a computer, computer system, network, software, password, account or data.
- Use of computing facilities or equipment to send sexually explicit, harassing or abusive messages.
- Any other act in violation of law and/or college policies and guidelines regulating computer-related use.

Discrimination by Student Organizations (See also [OMB 931.](#))

- Selecting its membership upon the basis of restrictive clauses involving race, religion, color, national origin, gender, age, sexual orientation or disability unless said selection is specifically allowed by law.

Disruptive Conduct

- Actions that impair, interfere with, or obstruct the normal operations of the College and or interfere with the rights of other members of the college community or visitors.
- Actions that impair, interfere with, or obstruct the orderly conduct, processes and functions within any classroom or other instructional setting. This includes interfering with a faculty member's or instructor's role to carry out the normal academic or educational functions of his or her class. Actions that may cause disruption in the classroom include, but are not limited to, making or receiving phone calls and the use

of text messaging while class is in progress; playing loud audio devices; persistent unapproved lateness; and any other action prohibited under this Code.

- Participating in, leading or inciting others to disrupt authorized scheduled campus activities, events and programs.
- Intentional obstruction of the free flow of pedestrian or vehicular traffic on college premises or at college sponsored or supervised functions.
- Solicitation on campus without prior approval from appropriate college officials.

Drugs

- Any legally prohibited possession, use, distribution, delivery, or sale of narcotics, prescription drugs or other controlled substances.
- Any legally prohibited possession or use of drug paraphernalia.

Failure to Comply

- Failure to comply with a lawful order of a college official, including a campus security officer, in the performance of his or her duty.
- Failure to comply with the sanctions rendered during the student judicial process.

Falsification/Fraud/False Testimony

- Furnishing false information to the College, including false reporting of emergencies, knowingly making false accusations or giving false testimony during the disciplinary process.
- Misuse, reproduction, alteration or forgery of any college related documents, records, identification, keys, access codes or property.

Fire and Safety

- Damage to, removal of or tampering with any fire safety systems, firefighting equipment or other emergency warning equipment.
- Intentional or reckless burning or setting fire to any building or piece of property owned or controlled by the College

Gambling

- Gambling or participation in games of chance on campus for money or other things of value, except as provided by law.

Hazing

- Any act that does not contribute to the positive development of a person, which inflicts or intends to cause physical or mental harm or anxieties, and or which demeans, degrades, or disgraces any person regardless of location, intent or consent of participants that is an explicit or implicit condition for initiation to, admission into, affiliation with, or continued membership in a group or organization.

Physical Abuse and Endangerment

- Physical violence or attempted physical violence toward another person or group.
- Threat of physical violence against another person or group.
- Any action that endangers the health, safety or welfare of a person or group. Attempt to harm, or actual harm to, oneself.

Property/Facilities/Services

- Theft of college property or property of a member of, or visitor to, the College.

- Damage, destruction, or defacement of college property or property of a member of the College or visitor.
- Wrongful appropriation of college property or property of a member of the College or visitor. Unauthorized possession and or use of college property or property of a member of the College or visitor, including knowingly being in possession of stolen goods.
- Unauthorized entry into college facilities, including but not limited to buildings, classrooms, hallways, entryways, conference
- Use or operation of rollerblades, skates, skateboards, bicycles, and similar items inside college facilities or other prohibited areas.

Sexual Misconduct/Sexual Harassment (See also [OMB 965](#).)

- Any sexual act that occurs without the consent of the other person or occurs when the other person is unable to give consent.
- Conduct of a sexual nature that creates an intimidating, hostile or offensive campus, educational or working environment for another person. This includes unwelcome sexual advances or requests for sexual favors, inappropriate sexual or gender-based activities, comments or gestures, or other forms of verbal or physical conduct or communications constituting sexual harassment.
- Obscene or indecent behavior, which includes, but is not limited to, indecent exposure or the display of sexual behavior that would reasonably be offensive to others.

Other Harassment/Stalking (See also [OMB 965](#).)

- Non sexual conduct that creates an intimidating, hostile, or offensive campus, educational or work environment for another person or group.
- Non sexual conduct that threatens, intimidates, humiliates, or otherwise harms another person or group.
- Stalking, defined as purposely and repeatedly following another person, and engaging in a course of conduct or making a credible threat with the intent of annoying or placing that person in reasonable fear of death or bodily injury.

Weapons/Firearms/Explosives

- Possession, storage or use on campus of firearms, pellet guns, paintball guns, gunpowder, ammunition, explosives, firecrackers, incendiary devices, or other articles or substances which could endanger health or safety.

Approved: December 21, 2006

Board of Trustees Meeting

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

SUSPENSION / EXPULSION POLICY

POLICY:

Student/learners who are or have been subjected to disciplinary action for violation of the College's Policies regarding Academic Integrity which have resulted in suspension or expulsion by the Mercer County Community College Academic Integrity Committee are no longer eligible to participate in any of the application based, externally accredited programs.

STATUS:

Suspension is a non-learner status during which a student/learner will not lose previously accrued credits but may not continue in any of the Health Professions programs. Students who have been suspended from the College will not be considered for re-admission or initial admission to any of the application based, externally accredited programs.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

PREGNANCY POLICY

Rights and Responsibilities of the Pregnant Student who is Taking Radiography Courses:

The policy for the Mercer County Community College Radiography Program is based on the US Nuclear Regulatory Commission Regulatory Guide Number 8.13, "Instruction Concerning Prenatal Radiation Exposure," National Council on Radiation Protection and Measurement (NCRP) Report Number 116, "Protection of the Embryo-Fetus," and the New Jersey Radiologic Technologist Board of Examiners.

Of significant concern is the possibility of radiation exposure during the early weeks of pregnancy even before a woman is aware that she is pregnant. During this period, embryonic tissues and organs are more sensitive to radiation than at any other time. Therefore, a woman of childbearing age shall be considered potentially pregnant with regard to radiation exposure. Each clinical affiliate employs safe practices and utilizes devices and accessories sufficient to protect all students from ionizing radiation.

Of significant concern is the possibility of radiation exposure during the early weeks of pregnancy even before a woman is aware that she is pregnant. During this period, embryonic tissues and organs are more sensitive to radiation than at any other time. Therefore, a woman of childbearing age shall be considered potentially pregnant with regard to radiation exposure. Each clinical affiliate employs safe practices and utilizes devices and accessories sufficient to protect all students from ionizing radiation.

A radiation dosimeter will be issued to any student who voluntarily discloses her pregnancy status in order to monitor the total dose equivalent to the embryo-fetus during clinical education activities. This is in addition to the dosimeter given to all students who are in clinical attendance for purposes of monitoring student radiation dose. The New Jersey Radiologic Technology Board of Examiners recommends a total dose equivalent not to exceed 5 mSv (0.5 rem) to the embryo-fetus during the entire period of gestation. Additionally, dose to the embryo-fetus shall not exceed 0.5 mSv (0.05 rem) in any month.

The Radiography Program coordinator and the Radiography Program's medical advisor shall review the radiation dosimetry reports to ensure that the recommended limits are not exceeded. Experience has shown that most radiography students, pregnant or not, receive radiation doses well below the recommended limits when standard radiation protection practices are observed.

The pregnancy policy at Mercer County Community College's Radiography Program is designed with two primary goals:

1. To minimize dose from ionizing radiation to the student and developing embryo/fetus,

And

2. To assure that the student is afforded the opportunity to complete the professional component of the Radiography Program curriculum

Disclosure of pregnancy status is optional. Should the student wish to disclose her pregnancy she can do so by obtaining written medical verification and submitting it to the Radiography Program Coordinator as soon as possible.

Upon notification, the pregnant student has the right to make one of the following choices:

1. Withdraw from radiography courses in progress and apply for a leave of absence

Or

2. Continue with the radiography courses in progress without modification

Should the student elect to discontinue her radiography coursework, provision for re-entry will be made at the time the leave of absence is discussed with the Radiography Program Coordinator. Each situation will be evaluated by the Radiography Program Coordinator on an individual basis.

If the student elects to continue with radiography courses without modification, that choice shall be honored by the Radiography Program. If later on during the course of pregnancy the student's medical condition changes in a way that threatens success in the classroom, the laboratory or in clinical education, reasonable measures shall be taken to accommodate the student if she requests them.

Accommodation shall be made provided the student submits written notification from her health care provider confirming the change in health status and need for modification. Whatever measures are taken, they will ensure completion of all program requirements in a safe and timely manner.

Note: Students also have the option to withdraw their declaration of pregnancy so long as it is declared in writing and directed to the Radiography Program Coordinator.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

CLINICAL EDUCATION

The clinical education experience provides students with opportunities to learn how to interact with people seeking health care, with the individual or health care team providing it, in an environment that can range from calm to fast-paced. The purpose of clinical education, therefore, is to assist students to gain mastery of the skills needed for effective interaction in order to provide the best possible patient care, produce optimal diagnostic radiographs, and exercise radiation protection. Successful transition into the clinical environment will increase self-confidence as well as proficiency.

The Radiography Program is one of the health professions programs at Mercer County Community College. As a radiographer-in-training, you will learn to provide a special clinical service to patients with emphasis on the individual without regard to race, creed, status or national origin. Learning to become a radiographer involves:

- Participation in the preservation of the health of the individual
- Utilizing all relevant resources to aid in the patient's diagnosis and management of his or her health problem
- Adhering to departmental and institutional policies, and ethical, legal and professional standards
- Collaborating with the health care team for the benefit of accurate, prompt diagnosis and treatment of the patient's health problem.

The radiographer's technical ability will enable the health care team to improve community health services and provide upward mobility for career development.

Education is an ongoing process involving continual development and refinement of the learner's thought processes and assimilation is evident in the learner's changes in behavior, habits and attitudes.

It is expected that the clinical education activities provided by Mercer County Community College's Radiography Program will profoundly enhance each student's life, making it possible for its graduates not only to secure entry-level employment, but to move forward with confidence in his or her abilities, knowledge and skills.

CLINICAL EVALUATIONS

To ensure that each student is making satisfactory clinical progress, each is evaluated at midterm and at the end of each semester. During this time, a - clinical preceptor (CP) reviews each student's performance and documents student progress and/or need for improvement. Two weeks prior to your mid-and end-term evaluations you will submit a self- evaluation and the clinical preceptor then compiles the feedback into a midterm and end-term evaluation.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

HEALTH RECORD

The New Jersey Department of Health requires that all students assigned to health care institutions for purposes of clinical instruction must pass a physical examination. The Radiography Program medical clearance requirements must be returned **with all items completed** except for certain immunizations in progress. All deadlines for vaccinations must be met as determined by the Radiography Program coordinator in order to begin or continue attending clinical education.

Every 12 months, students must be screened for tuberculosis (TB) and submit to a urine drug screen (UDS) by a licensed physician or nurse practitioner designated by the Radiography Program, and declared fit for clinical activities in a health care setting. Failure to submit evidence of fitness for duty will prevent the student from attending clinical education.

First-year students must complete this screening as part of their physical examination prior to taking their first radiography-specific course. Second-year students will be required for renewal prior to their second year in the summer term. All medical clearances will be completed and/or verified through Penn Medicine Princeton Medical Center Occupational Department.

CLINICAL AFFILIATIONS ADDITIONAL REQUIREMENTS (Subject to change)

COVID vaccination requirements, testing, and any additional clinical requirements will be necessary as per each individual clinical site and posted on Bb.

Note: All health records submitted to the Radiography Program remain confidential. No other person or organization has access to a student's health record unless the student gives signed permission to release such information.

**ANNUAL REQUIREMENTS TO MEET ELIGIBILITY FOR FOURTH SEMESTER
(Fall Term)**

- ☐ Student Liability Insurance (HPSO)
- ☐ Criminal Background Check (American Databank)
- ☐ 15 panel Urine Drug Screen (PMC Occupational Health)
- ☐ QuantiFERON TB screen (PMC Occupational Health)
- ☐ American Heart Association CPR for the Healthcare Provider (Valid through July graduation year)

All medical clearances will be completed and/or verified through Penn Medicine Princeton Medical Center Occupational Department.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

ELIGIBILITY FOR CLINICAL EDUCATION

In order to be assigned to the clinical education component of a course, or to take a clinical education course, the student must meet the following requirements:

- ☐ Complete all necessary forms for matriculation into the radiography program
- ☐ Attend all clinical orientation sessions
- ☐ Attend all preparatory laboratories
- ☐ Demonstrate successful proficiency during laboratory practical evaluations
- ☐ Earn a minimum grade of C + in all previously completed radiography courses
- ☐ Meet all the clinical competency evaluation requirements, and receive acceptable clinical progress evaluations

CRIMINAL BACKGROUND CHECKS

All students must complete a criminal background check prior to starting the first semester Radiography courses. Depending on clinical assignment in the second year of the program, students will be required to submit to a criminal background check as a condition of clinical attendance.

Eligibility to attend clinical education will be based on the most rigorous requirement in effect among the Radiography Program's clinical affiliations. A misdemeanor or felony conviction may prevent a student from being assigned to clinical education.

When required, students authorize the college to enlist the services of a qualified consumer reporting agency. The cost of obtaining a background report is the sole responsibility of the student.

If a student is deemed ineligible to attend a clinical affiliation because of an unfavorable background report, the Radiography Program will not be able to re-assign that student to another clinical affiliation.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

CLINICAL EDUCATION ASSIGNMENTS

Currently, the following hospitals are affiliated with the Mercer County Community College Radiography Program to provide clinical education (in alphabetical order):

- ☐ Capital Health Regional Medical Center, Trenton, NJ (609-394-6069)
- ☐ Capital Health Medical Center, Hopewell, Pennington, NJ (609-303-4056)
- ☐ Centra State Medical Center, Freehold, NJ (732-294-2935)
- ☐ Hunterdon Medical Center, Flemington, NJ (908-788-6382)
- ☐ Robert Wood Johnson Univ. Hospital at Hamilton, NJ (609-584-6604)
- ☐ Penn Medicine Princeton Medical Center, Plainsboro, NJ (609-853-9866)
- ☐ URad-EB (East Brunswick)/ 483 Cranbury Rd East Brunswick, NJ 08816/ 732-390-0030
- ☐ URad-M (Monroe)/ 111 Union Valley Rd Monroe, NJ 08831/ 609-395-3470
- ☐ URad-F(Freehold)/ 1043 West Main St., Freehold, NJ 07728
- ☐ Urad-S(Somerset)/ 75 Veronica Ave., Somerset, NJ, 08863, 732-246-0060
- ☐ PRA-M (Monroe)/ 9 Center Drive, Monroe, NJ 08831/ 609-655-1448
- ☐ PRA-P (Princeton)/ 419 North Harrison Street, Princeton, NJ 08540/ 609-921-3345
- ☐ PRA-QB (Quakerbridge)/ 8 Quakerbridge Plaza, Mercerville, NJ 08619/ 609-890-0033
- ☐ PRA-F (Freehold)/ 901 West Main Street, Freehold, NJ 07728/732-462-4844
- ☐ PRA-NP (North Point)/ 176 Route 9, North Marlboro, NJ 07726/732-577-2750
- ☐ PRA-L (Lawrenceville)/ 3120 Princeton Pike, Floor 1A, Lawrenceville, NJ 08648
- ☐ PRA-H (Hamilton)/ 2501 Kuser Rd., Hamilton, NJ 08691/609-585-1825
- ☐ PRA-EW (East Windsor)/ 300a Princeton Hightstown Rd., Suite 101, East Windsor, NJ/609-426-9200

Students will be assigned to a minimum of two (2) hospitals during two-year course of study as well as one PRA or URAD site during a one semester term to be determined by the clinical coordinator (The number of semesters assigned to an outpatient clinical site may vary according to necessity).

The following clinical courses correlate with the first and second-year clinical rotations, respectively:

First Year

- RAD 127 Radiographic Procedures I (Fall I)
- RAD 128 Radiographic Procedures II (Spring I)
- RAD 207 Clinical Practicum (Summer U)

Second Year

- RAD 228 Radiographic Procedures III (Fall II)
- RAD 240 Advanced Clinical Experience I (Spring II)
- RAD 242 Advanced Clinical Experience II (Summer A)

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

CLINICAL EDUCATION POLICIES

Clinical Education Hours

The standard clinical education hours for all semesters are from 8:00 a.m. to 4:00 p.m. An off-hour evening assignment is scheduled in semester VI. Students shall attend clinical education only during scheduled hours and days provided by the Radiography Program Clinical Coordinator. A sign-in sheet will be provided for use to log clinical hours attended. The honor system will be in effect. Intentional misrepresentation of sign-in and sign-out times will be treated as an academic integrity violation and subject the student to the sanction that would result from its reporting to college authorities.

Students are expected to sign-in when they arrive at the clinical site within Trajecsyst, and sign out prior to leaving. Students are not to sign in for another student under any circumstances, as this constitutes falsification of documentation, subject to dismissal from the Radiography Program.

All students are expected to be in their assigned clinical areas at the hospital prepared to engage in clinical education activities at 8:00 a.m. sharp. Failure to meet this requirement constitutes lateness. Chronic lateness will not only lower a student's clinical grade in proportion to number of absences, but also subject him/her to progressive disciplinary action.

Absences from Clinical Education

All students are allotted two (2) days for emergencies, illnesses, doctor's appointments or other legitimate reasons.

Whether in their first or second year, Radiography Student Association (RSA) officers are excused without reduction of their allotted time for official club activities when scheduled and approved by the RSA faculty advisor.

Exceeding the number of allowed absences will reduce a student's clinical grade in proportion to the number of excess absences. Chronic absenteeism is a serious problem that can jeopardize a student's ability to successfully complete clinical requirements. Accordingly, students who exhibit chronic absenteeism will be subject to progressive disciplinary action.

Absenteeism and/or tardiness the clinical preceptor warrants a documented performance improvement action will result in the respective final course grade reduction. The respective final course grade will be reduced as follows: Verbal warning: three (3) points, written warning: five (5) Second written warning seven (7) points, Referral to college: ten (10) points.

Students must call their clinical site if they will be absent or late on the day assigned. They must speak to a clinical preceptor and give the reason for the absence by 8:00 a.m.

Additionally, students must email or call either professor Kerr @ 609-570-3337 or Professor Greer @215-630-6371 and leave a message on the voice mail system, giving reason for the absence. Failure to call in by the required time will be subject to progressive disciplinary action.

Requests for Time Off

Students who require time away from clinical education outside of the normal college holiday and recess periods can request time off by submitting a Time-Off Request Form found on Trajecsyst. Unless the request is based on an emergent situation requiring immediate approval and release from clinical education, students should submit their request with reasonable anticipation (e.g., one week's advance notice). The clinical preceptor reviews the request and determines whether the time away from clinical is warranted. If approved, a copy of the signed request form must be returned to the Radiography Program to be kept in the student's file.

Please note that approval for time off will require use of any allowance for illness or emergencies. If there are no allowances left, the student's clinical grade will be lowered in proportion to the amount of time off approved.

Students should carefully consider the implications that time away from clinical education can have, not just on the clinical grade, but on the student's missed clinical opportunities. The exception is where the request for time off is in relation to an activity approved by the Radiography Program Coordinator such as a Radiography Student Association activity or a Registry review seminar. In such instances, no deduction is made to the student's attendance grade.

Clinical Attendance Regulations

The student is subject to all of the rules and regulations of the clinical affiliation attended. The clinical affiliation has the right to dismiss from that affiliation any student who demonstrates any breach of the rules or displays unethical behavior, illegal behavior, or does not fulfill clinical objective obligations. Any student dismissed from an affiliation is subject to disciplinary action.

Students must successfully complete all assigned clinical objectives by the end of each semester in order to be eligible to advance to the next level radiography course. In the event that a student cannot complete assigned objectives in a timely manner, that student will not be able to progress to the next level unless it can be shown that the inability to complete objectives was due to circumstances beyond the student's control. The exception is the final term; whereas all CCE's must be completed. Further, it must be shown that the student made a good-faith effort to meet objectives. The Radiography Program Coordinator in consultation with the Clinical Coordinator and senior clinical preceptor will review each situation on a case-by-case basis.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

TIME-OFF REQUEST FORM

1. STUDENT'S NAME: _____

2. DATE OF REQUEST: _____

3 FOR CLINICAL TIME- _____ OFF: TOTAL
DAYS TO _____ BE TAKEN
DAYS/DATES _____

IF LESS THAN ONE DAY, HOW MANY HOURS REQUESTED? _____

4. REASON FOR REQUEST (CHECK APPROPRIATE BOX):

EDUCATIONAL ACTIVITY (RELEVANT TO RADIOLOGIC TECHNOLOGY) ☐

EMPLOYMENT INTERVIEW ☐ OTHER (EXPLAIN): _____

5. STUDENT _____ SIGNATURE: _____

SECTION BELOW TO BE COMPLETED BY FACULTY OR SENIOR INSTRUCTOR AS APPLICABLE

THIS SECTION TO BE COMPLETED BY FACULTY	THIS SECTION TO BE COMPLETED BY SENIOR CLINICAL PRECEPTOR
☐ REQUEST APPROVED ☐ REQUEST NOT APPROVED 	☐ REQUEST APPROVED ☐ REQUEST NOT APPROVED
SIGNATURE DATE	SIGNATURE DATE

Transportation

The Radiography Program cannot guarantee that clinical assignments will coincide with student preferences. Mercer County Community College Radiography Program students are responsible for providing their own transportation to attend clinical assignments.

Holidays

All holidays observed by the college will be considered holidays for students. Clinical sites that observe holidays that coincide with scheduled clinical days will also be regarded as holidays by those students assigned to that facility.

Weather-Related School Closings

When college classes are cancelled due to inclement weather, students will not be permitted to attend clinical education. Students can check the college web site for announcements of cancellations. They should also activate their Mercer Mail account and arrange to receive e-mail, text-message, or telephone notifications. When the college announces a delayed opening due to inclement weather, students are expected to attend clinical education at the time of the opening.

Dress Code

The personal appearance and demeanor of radiography students at Mercer County Community College reflect both the college and Radiography Program standards and are indicative of the student's interest and pride in his or her profession. All students are expected to present a professional appearance at all times.

The following rules apply to all radiography students in clinical attendance:

- Maintain personal hygiene by bathing (showering) and using deodorants
- Hair must be neat at all times. Long hair will be tied back and kept off the face. All students will maintain a neat hairstyle consistent with professionalism. If a head dressing or hair wrap must be worn, it must be a neutral color.
- Beards, mustaches, and sideburns must be kept trim
- Fingernails should not extend beyond the fingertips. Artificial nails, acrylic, shellac and gel nail polishes are prohibited
- Perfume, cologne, and/or heavily scented body products are prohibited
- Students are permitted to wear wedding or class rings and wristwatches.
- Small earrings are permitted
- White shoes or sneakers are required. Shoes should be cleaned and polished. No crocs should be worn.
- No noticeable odor of tobacco smoke on person or clothes
- Uniform must be purchased at the specified company designated by the Radiography Program coordinator. Any deviations from stated dress code policy are unacceptable
- One stud piercing per ear is permitted. No other visible face or body piercings are permitted. Clear placeholder studs may be permitted
- Excessive and objectionable tattoos as well as tattoos displaying intolerant imagery are prohibited. Tattoos must be covered and not visible during clinical education.

A light amount of make-up may be worn. Heavy eye make-up is not permitted.

Uniform apparel includes (as obtained from the authorized vendor):

- Green scrub top with MCCC embroidery
- Green scrub pants
- White short sleeve t-shirt is acceptable under green scrub top. No other colors are permitted
- White socks
- White warm up jacket with MCCC embroidery
- MCCC student ID and required agency ID are worn at all times
- All white shoes or sneakers (vendor of choice), clogs are not permitted

When students are assigned to the operating room, scrub suits may be worn. Upon returning to the radiology department for any period during clinical education, the warm up jacket with MCCC patch, college and hospital

identification tags must be worn over the scrub suit. The student must wear the college uniform to the clinical facility and change into the required attire. The college uniform must be worn upon leaving the clinical facility.

Students are also expected to have in their possession during clinical education hours the following accessories:

- Personal radiation monitoring device
- Right and left radiographic markers approved by the Radiography Program
- Radiographic Procedures Pocket Guide
- Clinical Education Student Handbook

Students who are not properly attired, who are not in possession of their Clinical Education Student Handbook, markers and dosimeters, or who lack proper hygiene or professional appearance and specified in this Handbook, shall be dismissed from clinical education until the identified deficiencies are remedied. Arrangements must be made to replace missing or lost dosimeters, identification tags, and patches before the student will be allowed back into clinical education. Students will be responsible for completing required clinical objectives without the benefit of make-up time. The absence(s) resulting from not being properly attired will be treated as unexcused absences.

Rules of Clinical Behavior

Smoking is not permitted in the clinical facility, on the outside property, or in a vehicle parked at the clinical facility. All clinical facilities are smoke free campuses.

Legal papers (i.e., consent forms) are not to be accepted, signed or witnessed by students for patients. Students do not transact any business for patients. Business offices of the hospitals handle this. If a student witnesses (with his or her signature affixed to a document) or transacts business, that student's agency won't be recognized by hospital or court of law.

Personalized lead markers are to be used only by the student to whom they are issued. They are not to be loaned to anyone, including staff technologists. Failure to comply will result in serious disciplinary action. Students are not to make dates with or accept gifts from patients. This is both unethical and unprofessional.

Everything possible is to be done to assure a patient's safety while in the radiology department. If a patient is injured, even though it may be slight, it is to be reported to the clinical preceptor immediately. You will be directed as to the information required if an incident report is to be filed. A copy of the incident report is required for the college records if allowed by the clinical facility. If a student is injured during clinical education, it must be reported to the Radiography Program coordinator as soon as possible.

Students are expected to remain in their assigned areas of the radiology department unless given explicit permission from a supervising technologist or clinical preceptor to move to a different area. Reassignment may be necessary if the assigned area of radiology is not taking many patients or a radiographic room is under repair.

Students are subject to the same radiology department rules that staff technologists follow with respect to breaks and lunch.

Use of Electronic Devices

Upon arrival at the clinical education center, students must turn off all personal electronic communication or entertainment devices and place these in a secure location such as a locker. The use of cellular phones, smart phones, text messaging, smart watches, entertainment storage devices, or any other electronic device or accessory

not approved by the Radiography Program is prohibited within the confines of the clinical education center. Use of air pods or other listening accessories is specifically prohibited within the confines of the clinical education center.

Students should arrange to receive emergency communications through the radiology department's main desk. For purposes of clarity, emergency communications are those received from family members, baby sitters, etc. regarding such matters as illness, accident, fire, hazard or other like matter that requires immediate reply by the recipient.

Approved electronic devices – when they become available – will be those made available to students in connection with clinical education activities ONLY.

Students are also prohibited from uploading or downloading data using USB-type flash storage devices – also known as “thumb,” “jump,” or “key-ring” drives – on any hospital computer for any reason. The use of thumb drives in the hospital poses a serious risk of computer infection which could result in damage to an institution's computerized systems and services. The clinical education center has the right to refuse into clinical education any student who violates its policies, including the use of USB-type flash storage devices on any of its computers.

At facilities that can provide the service, the use of CDs (compact discs) in clinical education shall be limited to burning (recording) anonymous radiographic images for use during preparation and delivery of image evaluation preparations. Students should consult with their radiology department supervisor or clinical preceptor regarding the availability of this service.

Social Media Policy

Students should use care when referring to their program on social networking sites. It is the students' responsibility to be aware of Federal and State laws regarding privacy and confidentiality of Information. The faculty has adopted the Principles for Social Networking:

- 1. Students must not transmit or place online individually identifiable patient information.*
- 2. Students must observe ethically prescribed professional patient boundaries.*
- 3. Students should understand that patients, colleagues, institutions, and employers may view postings.*
- 4. Students should take advantage of privacy settings and seek to separate personal and professional information online.*
- 5. Students should bring content that could harm a patient's and/or coworkers' privacy, rights, or welfare to the attention of appropriate authorities.*

Tips to Avoid Problems:

- 1. Remember that standards of professionalism are the same online as in any other circumstance.*
- 2. Do not share or post information or photos gained through the patient relationship*
- 3. Maintain professional boundaries in the use of electronic media. Online contact with patients blurs this boundary.*
- 4. Do not make disparaging remarks about patients, employers, coworkers or clinical agencies, even if they are not identified.*
- 5. Do not take any photos or videos or audio recordings in the clinical environment including the College laboratory setting.*
- 6. Promptly report a breach of confidentiality or privacy.*

Students who violate this social media policy do so at the risk of being subject to HIPAA procedure/ guidelines and consequences and do so at the risk of disciplinary action that can be course failure and/or dismissal from the program.

RADIATION PROTECTION AND MONITORING

Students are expected to exercise sound radiation protection practices at all times while in the radiology department or energized x-ray laboratory. At no time will a student participate in any procedure that involves unsafe radiation practices.

Radiation Monitoring Devices

In accordance with New Jersey Administrative Code, Title 7, Chapter 27, Subchapter 7.4(a), Mercer County Community College will provide radiation-monitoring services to all students. Students are required to wear a radiation dosimeter in the clinical facility. If laboratory activities at the college involve the generation of x-radiation, separate radiation dosimeters will be issued for that purpose.

Students will not be permitted to attend clinical education if they are not wearing an up-to-date radiation dosimeter. Students should leave their radiation dosimeters in the designated location within the radiology department where available. Do not remove them from the hospital unless instructed to do so by the Radiography Program faculty.

If a radiation dosimeter is lost or damaged, it must be reported to the Radiography Program Coordinator immediately. A replacement dosimeter will be issued as soon as a written explanation of the loss or damage is received. Until a replacement is issued, the student cannot attend clinical education.

In the event that lost radiation dosimeter is found in a radiographic/fluoroscopic room, it shall not be used. Instead, it must be returned to the college for processing. The replacement dosimeter will be used in place of the recovered badge.

Radiation reports are reviewed quarterly and initialed after review by each student. At the completion of the Radiography Program, each graduating student will receive a report by regular mail summarizing the radiation dose received while in school and clinical education. This report is a valuable document and should be kept in a safe place. A copy should be furnished to his or her employer so that lifetime dose can be recorded and updated. In keeping with basic radiation concepts, each student is responsible for keeping lifetime dose accumulation as low as reasonably achievable (ALARA).

Radiation Overexposure Policy

Should an enrolled radiography student receive a radiation dose that exceeds the annual limits referenced in New Jersey Administrative Code, Title 7, Chapter 28-6:1(a), or the periodic limits prescribed in New Jersey Administrative Code, Title 7:28-19.13(f)13, that student will be advised in writing of the overexposure. The student will be required to submit a report outlining the circumstance(s) that could have contributed to the overexposure so that preventive actions and/or policies can be developed and implemented by Radiography Program officials. The student will also be required to consult with an affiliation radiologist or radiation physicist to discuss potential health issues arising from the overexposure.

Action is taken if any of the following periodic limits are reached or exceeded as indicated on dosimetry reports:

- An exposure of 50 mrem (0.5 mSv) or greater on any monthly report, or
- 100 mrem (1.0 mSv) or greater on any bi-monthly report, or
- 150 mrem (1.5 mSv) or greater on any quarterly report, or
- Any exposure that exceeds the limits of N.J.A.C. 7.28-6.1

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

LOST OR DAMAGED RADIATION DOSIMETER REPORT

STUDENT NAME

**.DOSIMETER
#**

CLINICAL FACILITY

DATE

**PLEASE PROVIDE DETAIL SURROUNDING THE LOSS OF, OR DAMAGE TO, THE
RADIATION DOSIMETER (WHEN DID YOU FIRST NOTICE IT MISSING OR
DAMAGED? IF FOUND, WHERE AND WHEN WAS IT FOUND?)**

NEW DOSIMETER #

STUDENT SIGNATURE:_____

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

BASIC RADIATION PROTECTION RULES

The following rules apply under any and all circumstances while in the radiology department. Failure to comply with these rules may necessitate removal from the clinical setting until remediation is performed to reinforce radiation protection awareness.

- **NEVER hold image receptors during any radiographic procedures.**
- **NEVER hold patients during any radiographic procedure when an immobilization method is the appropriate standard of care.**
- **ALWAYS wear a radiation dosimeter at the collar while assigned to clinical education.**
- **When wearing a lead protective apron, always wear the radiation dosimeter outside the apron at the collar.**
- **NEVER leave a radiation dosimeter in the radiographic/fluoroscopic room.**
- **NEVER remain in the radiographic room when an exposure is being made.**
- **NEVER wear a radiation dosimeter if personally having a medical or dental radiograph.**
- **NEVER make an exposure with the main door to the radiographic/fluoroscopic room open.**
- **ALWAYS wear a lead protective apron during table side fluoroscopy and portable radiography.**
- **ALWAYS stand behind the lead protective barrier when making an exposure.**
- **ALWAYS use the smallest field of exposure consistent with departmental protocol that will produce diagnostic images.**

STUDENT SAFETY IN MAGNETIC RESONANCE IMAGING

Although the majority of a student's clinical experience will involve training in an environment where ionizing radiation is used, there will be occasions when the student may be in close proximity to imaging equipment that utilizes strong magnetic fields and radio frequency radiation. It is under these circumstances that students must be aware of the safety precautions in place at their respective training facilities and to adhere to them strictly.

MR safety is reviewed with all students prior to their first day of clinical education and the students also must complete a MR screening form at that time and then again prior to the students advanced modality rotation in MR. Students must notify program officials should there be any change in status. If a student declares that he or she has a condition which would be considered a potential contraindication to entering Zone III and Zone IV, the form will be reviewed by a Level II MR technologist at the assigned clinical setting to determine subsequent action. They will then be rescreened by the Level II MR technologist at the assigned clinical setting prior to entering Zone III.

Policy (General MR Safety): When students are at a facility where magnetic resonance imaging (MR) is used, they must observe the protection standards that are in place. For the safety of the public and the staff at the facility, warning signs will be posted. Those areas are demarcated as follows:

- MRI Zone I: This area is farthest from MRI equipment and may be occupied by the general public.
- MRI Zone II: This area is used to screen patients and personnel prior to entry into the control area and scan room. The area may include dressing areas, lockers and a place for patient screening to occur. Loose metallic objects, including cell phones, watches, wallets, body piercing and other jewelry must be removed and kept in the designated locker.
- MRI Zone III: This is a restricted area and access is allowed by authorized MRI staff. The area involved is usually the control area that includes the MRI controls, computerized equipment and monitoring devices.
- MRI Zone IV: The scan room is where the magnet is located and is the most restricted of areas. Access can only occur through Zone III. Patients can only enter this area with direct supervision of MRI staff. Direct supervision is maintained until the patient leaves the area.

In general, warning signs will be placed that clearly indicate that the area in question has restricted access and may appear as the ones illustrated or a variation thereof:



No student is to enter that area under any circumstances unless they have been properly and thoroughly screened by an authorized MR technologist, health physicist or radiologist in Zone II.

Policy (MR Clinical Observation Safety):

Students electing to participate in a one-day clinical observation in MR as part of RAD217 Advanced Imaging Modalities will be screened in accordance to the steps outlined below:

**Princeton Radiology
Associates (PRA)**

- Students who elect MR as an observation will be given a screening form of the kind acceptable to Princeton Radiology Associates. The form will be provided by the Radiography Program.
If the status of the student has changed in any way following completion of the initial screening process a new screening form MUST be completed prior to MR rotations.
- The course coordinator will review the screening form for completeness and obtain additional information that is relevant to the screening process.
- If it is determined at the pre-screening level that exposure to MR-strength magnetic fields up to 3T (Tesla) could pose a health or safety risk, those students will be advised of their ineligibility and asked to consider another observation experience.
- Otherwise, on the day of the observation, pre-screened students undergo a second screening at Princeton Radiology Associates, but will include the previously completed screening form.
- If at the time of the on-site screening it is determined that a student is not eligible to continue with the observation, the student will be so advised and asked to report back to his or her
- Normally scheduled clinical rotation. It is the student's responsibility to inform the
- Radiography Program of the situation so that an alternate clinical observation can be arranged.

University Radiology (URAD)

- Students will be required to complete a brief online safety training video with follow up exam given to them by URAD. They will be sent a link to Litmos, their log in, passwords, and basic instructions.
- Students who elect MR as an observation will be given a screening form by the Radiography Program.
If the status of the student has changed in any way following completion of the initial screening process a new screening form MUST be completed prior to MR rotations.
- The course coordinator will review the screening form for completeness and obtain additional information that is relevant to the screening process.
- Students are required to also review a brief power point presentation given to them on MR and MR Safety given to them by the Radiography program.

DISCIPLINARY POLICY

Although it is presumed that all radiography students exercise maturity and sound judgment in the process of becoming productive members of the health care community, there are occasions when it becomes necessary to address matters of conduct and discipline. In the event that disciplinary action becomes necessary, the Radiography Program faculty will exercise fairness, utilizing progressive discipline when possible.

The type of disciplinary action taken will depend on the seriousness and nature of the offense, and the student's history of problems. Disciplinary action may include one or more of the following:

- Verbal counseling when the infraction is relatively minor or a first offense
- Written warning which may become part of the student's permanent file when verbal counseling fails to achieve the desired change in behavior
- Removal from the Radiography Program when steps 1 and 2 fail to produce desired change in behavior, or conduct presents a danger to self and others, and
- Referral to the Student Conduct and Disciplinary Committee of the college

Remember, the aim is to promote those behaviors, which best serve the needs of patients, the health care institution providing health care services and the community. The following are considered just cause for disciplinary action:

- Abuse or inconsiderate treatment (assault) of visitors, patients, students and clinical personnel
- Use or possession of alcoholic beverages on college or hospital premises
- Use or possession of illegal drugs
- Willful misuse of hospital property
- Refusal to accept a reasonable clinical assignment
- Soliciting or accepting tips from patients and/or visitors
- Excessive absences or lateness
- Failure to report absence promptly
- Signing in or out for another student
- Falsification of attendance records
- Falsification of clinical competency records
- Refusal to conduct oneself according to hospital or department standards
- Willful disregard or violation of safety rules
- Stealing from employees, patients, other students
- Leaving the clinical assignment without permission
- Releasing confidential information without authorization
- Sleeping during clinical assignment
- Smoking in areas where it is prohibited
- Chewing gum or tobacco products while on clinical assignment
- Failure to report to clinical assignment in an alert condition
- Failure to report to clinical assignment in proper attire (see dress code)
- Using the clinical facility's telephone for personal use
- Leaving patients unattended during radiographic procedures
- Impersonating a licensed or credentialed health care professional

The following are considered just cause for immediate dismissal from the professional phase of the radiography program:

- Any behavior which violates a hospital/clinical site regulation and results in denial by the hospital/clinical site of clinical privileges
- Action which knowingly endangers the health or wellbeing of the student, a fellow student, patient or hospital personnel
- Vandalism or abuse of clinical equipment
- Engaging in acts of moral turpitude as defined by the clinical affiliation rules and regulations governing employee conduct
- Repeated and/or serious violations of the MCCC Student Conduct Code, Radiography Program policies, or MCCC academic integrity policy

Due Process and Grievance Procedure

Please refer to the college publication **Student Handbook** for an explanation of the student due process procedures.

The procedures applicable to campus activities are also applicable to Radiography Program clinical education. Students should address their concerns in accordance with the procedure outlined in the section titled Grievance Procedure. <https://www.mccc.edu/pdf/handbook.pdf>

Matters involving sexual/gender harassment are addressed in the college publication **Title IX: Sex/ Gender Harassment, Discrimination and Misconduct**. Both publications can be downloaded from the college's web site. Go to www.mccc.edu and click the Current Students menu tab.

Please refer to the student code of conduct in the MCCC student handbook that addresses bullying as well as other possible infractions on student conduct.
<https://www.mccc.edu/pdf/handbook.pdf>

Please also refer to the College Safety & Security Policies:
https://www.mccc.edu/welcome_security.Shtml

With respect to Radiography Program compliance with Joint Review Committee on Education in Radiologic Technology accreditation standards, each student is encouraged to address his or her concerns regarding the Radiography Program if he or she feels that the Program is not fulfilling its mandate. The publication, **Standards for an Accredited Educational Program in Radiography**, is distributed along with the **Clinical Education Student Handbook**.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

PATIENT CONFIDENTIALITY

Students are required to keep all information concerning patients strictly confidential. All students are urged to refrain from idle gossip, loud talking and any other activity that could be disturbing to patients. On the other hand, courtesy and cheerfulness are important and make for a pleasant relationship with fellow students, employees, patients and the public.

Patients' charts are confidential and the information contained must not be discussed even with the patient, family, visitors, or anyone who is not directly involved with the care and treatment of the patient. As a member of the Mercer County Community College Radiography Program, you represent not only the college, but also the clinical facility you are assigned to. The impression you leave with each person is very important to the hospital and the health care team as well as fellow students.

The clinical facility reserves the right to refuse admission into clinical education any student whose conduct is not professional or conducive to proper patient care.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

INFECTION CONTROL

Students who train in a health care environment should recognize the potential that exists to become inoculated with infectious organisms. Conversely, care must always be taken to prevent personnel-to- patient transmission of infection. Personnel-transmitted infection is the leading cause of secondary illness among patients in hospital settings (called nosocomial infections).

The following rules should be followed to break the chain of transmission:

- Always wash hands between patient contacts. This can be accomplished by the use of soap and warm water. Rub the palms, backs of the hands and interdigital spaces for at least ten seconds and rinse thoroughly. Dry hands with paper towels. If using a faucet that must be manually shut off, use paper towels. An alternative to the soap and water method is to use an antimicrobial hand lotion. These are available in the radiology departments or can be purchased at a local pharmacy for personal use.
- All student radiographers who perform or assist in invasive radiographic procedures (e.g., barium enemas) should wear gloves when touching mucous membranes or non-intact skin of patients and use other appropriate barrier precautions when indicated. Certain procedures increase the risk of splashing of blood or other body fluids. If the potential for splashes exists, gowns, protective eyewear and facemasks should be used.
- All student radiographers who perform or assist in invasive procedures must use extraordinary care to prevent injuries to hands caused by needles, scalpels, and other sharp instruments or devices. After use, disposable needles, syringes, scalpel blades and other items must be placed in puncture-resistant containers for disposal as infectious waste. To prevent needle stick injuries,
- NEEDLES SHOULD NEVER BE RECAPPED, PURPOSELY BENT OR BROKEN, REMOVED FROM DISPOSABLE SYRINGES, and OR OTHERWISE MANIPULATED BY HAND.
- If a glove becomes torn, the gloves must be replaced as promptly as patient safety permits. If a puncture to the skin occurs, report it immediately to the clinical preceptor in charge so that appropriate measures can be taken. The incident must be documented and the Radiography Program Coordinator notified.
- No student radiographer who has exudative (oozing) lesions or weeping dermatitis shall perform or assist in invasive procedures or direct patient care activities or handle equipment used for patient care.
- Any student radiographer with evidence of any illness that may compromise their ability to adequately or safely perform or assist in invasive procedures must be evaluated medically to determine whether they are competent to perform invasive procedures

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

INJURIES SUSTAINED DURING CLINICAL EDUCATION

Students who sustain injuries of any kind while in clinical education setting must report the incident to their clinical preceptors immediately. The student should be seen in the emergency room and treated. However, the student retains the right to refuse treatment in that facility. Regardless, the student must evidence medical clearance in order to return to clinical education regardless of where the treatment took place.

The clinical site must generate an incident report. The student is expected to provide any information that will be helpful in completing the incident report.

Any expense incurred as a result of being treated can be submitted for reimbursement by attaching them to the insurance claims form which is available at the MATH, SCIENCE, & HEALTH PROFESSIONS DIVISION office. Students must also obtain copies of their medical record in connection with treatment and submit them with the insurance claims form.

STUDENT INJURY, ILLNESS, OR CONDITION

Any student, who has any type of injury/illness/condition that may impede their clinical performance or put patient population at risk, must present a physician/nurse practitioner note certifying the student's ability to **resume full clinical and laboratory activities without restrictions**. The presentation of the note does not assure access to the clinical area. Unless full clearance to participate in clinical/lab activities is obtained from a healthcare provider, students will not be permitted to participate in clinical and lab activities. The student may be referred to the Center for Inclusion, Transition and Accessibility to determine clearance to participate in clinical and laboratory activities.

After hospitalization, surgery or childbirth, students must submit medical clearance to the Radiography Program Clinical Coordinator and/or Center for Inclusion, Transition and Accessibility prior to returning to clinical education and scheduled laboratory sessions.

If radiography program faculty or clinical preceptors have concerns about a student's ability to safely participate in clinical activities, a student may be requested to obtain additional clinical clearance. If you have a documented differing ability or think that you may have a differing ability that is protected under the Americans with Disabilities Act, Section 504 of the Rehabilitation Act or college policy, please contact Arlene Stinson of the Center for Inclusion, Transition, and Accessibility at stinsona@mccc.edu for information regarding support services.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

ESSENTIAL FUNCTIONS

The essential functions outlined below are meant to inform prospective radiography students regarding the attributes and abilities that they should possess in order to be successful. This document will not be used as the basis for determining eligibility to begin radiography studies at MCCC, nor will it be used during the professional phase selection process.

PERSONAL ATTRIBUTES AND PHYSICAL REQUIREMENTS EXPECTED OF THE RADIOGRAPHER

INTELLECTUAL: Ability to synthesize classroom and clinical instruction to comprehensively apply knowledge of anatomy and physiology, radiographic positioning, image production and evaluation, radiation physics and protection, and patient care to each radiographic and fluoroscopic procedure performed.

EMOTIONAL/MENTAL: Ability to provide empathetic care to all patients with whom the radiographer interacts without regard to the personal attributes of the patients. Possess the ability to work with others in the completion of tasks for the benefit of patients. Have the stability to handle stressful situations requiring clear thinking and presence of mind, especially in life threatening situations. Be alert to patient's need for safety and comfort.

VISUAL: Ability to read and understand the words, numbers and measurements on a variety of devices and equipment used in a medical facility in normal reading light or where illumination is back-lit. Perform radiographically-related tasks in dimly lit procedure rooms during fluoroscopic procedures using scotopic (dark-adapted) vision.

VERBAL/WRITTEN: Possess written and verbal skills sufficient to effectively communicate with patients and members of the health care team in the English language. Ability to clearly and audibly explain procedures, give instructions and direction, and ask appropriate screening questions to patients in the English language. Understand written and verbal instructions given by physicians in the English language.

HEARING: Ability to hear and recognize alarms on a variety of equipment used while within the confines of, or near, the rooms in which procedures are being done. Ability to hear a patient who may call for immediate assistance while within the confines of, or near, the rooms in which imaging procedures are being done. Ability to hear and understand instructions given by physicians in the English language.

PHYSICAL: Ability to manipulate locks, dials, switches, toggles and other devices on equipment in order to perform routine radiographically-related tasks* Ability to draw solutions and medications into syringes in the proper doses. * Ability to push, pull and lift as necessary to perform routine radiography-related tasks. Ability to exercise reasonable care in the control of wheelchairs and stretchers while transporting patients. Ability to spend long periods standing and walking with or without wearing coat-length lead protective garments.

*Graduates wishing to practice medical radiography in the State of New Jersey must be licensed by the Department of Environmental Protection. Only licensed radiographers can operate medical x-ray equipment on human beings. Some medical facilities may require the radiographer to perform venipuncture and/or administer iodinated contrast media intravenously.

PROFICIENCY STANDARDS TO FULFILL THE DEGREE REQUIREMENTS OF THE MERCER COUNTY COMMUNITY COLLEGE RADIOGRAPHY PROGRAM AND EARN LICENSURE TO PRACTICE IN NEW JERSEY

- Positions patients on the radiographic table or wall device to obtain optimal images of relevant radiographic anatomy of the head, neck, abdomen, and pelvis, upper and lower extremities, covering the

musculoskeletal, respiratory, cardiovascular, neurological gastrointestinal and genitourinary systems. Utilizes the necessary positioning and immobilization devices to ensure accuracy and patient comfort.

- Communicates with patients to reduce anxiety and to instruct in the proper gowning and positioning for each radiographic study performed. Explains the dietary preparation to patients anticipating radiographic studies of the gastrointestinal and urinary tracts. Screens female patients of reproductive capacity prior to conducting radiographic studies of any kind. Effectively communicates with all members of the health care team.
- Exercises care and judgment in protecting the patient from unnecessary radiation exposure by formulating optimal exposure factors, utilizing lead protective shielding and beam-restricting devices as appropriate. Protects himself/herself from radiation exposure by utilizing distance and shielding as appropriate.
- Moves the x-ray equipment into the proper distance and alignment with the patient and image receptor (film) to obtain the correct images of relevant anatomy. Operates mobile x-ray equipment in the operating room, emergency room, or patient's bedside.
- Measures patient thicknesses as appropriate to determine the optimal exposure factors to be used. Adjusts the dials, buttons and switches on the control panel which determine the proper amount and energy of the x-ray beam. Activates the x-ray exposure switch. Performs radiographic examinations as directed by a licensed physician.
- Performs as the technical assistant to the radiologist or other medical specialist during fluoroscopic studies which include the tasks outlined in items 1 through 5 above. Additional duties are carried out as requested by the supervising physician.
- Prepares medications and contrast media (which increase the visibility of certain internal organs) for patient administration utilizing syringes, needles, vials, ampules, water-soluble iodinated compounds and barium solutions

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

CLINICAL COMPETENCY PROCESS (GENERAL REQUIREMENTS)

The clinical competency process utilized by the Mercer County Community College Radiography Program is based on the model adopted by the New Jersey Radiologic Technology Board of Examiners.

It requires that all radiography students follow a prescribed path toward attainment of competency in specified radiographic and fluoroscopic procedures.

For each radiographic and fluoroscopic procedure, the process requires:

- Coverage of the radiographic procedure in the classroom with practice activities in the laboratory setting
- Successful demonstration of knowledge and skill of the procedure through written tests and laboratory practical examinations
- Observation of the procedure in the clinical setting
- Participation in the procedure with direct supervision of a licensed radiographer while in the clinical setting
 - o Direct supervision is defined as student supervision by a qualified radiographer who: reviews the procedure in relation to the student's achievement, evaluates the condition of the patient in relation to the student's knowledge, is physically present during the conduct of the procedure, and reviews and approves the procedure and/or image. Repeat images must be completed under direct supervision
- Documentation of a minimum of **two (2) practice examinations** (called trial examinations) for mandatory or **one (1) practice examination** (called trial examination) for electives with direct supervision of a licensed radiographer in the clinical setting
- Successful clinical competency evaluation (CCE) of the radiographic procedure as determined by a recognized clinical preceptor
- Subsequent performance of the radiographic or fluoroscopic procedure with indirect supervision of a licensed radiographer
- Indirect supervision is defined as student supervision provided by a qualified radiographer who is immediately available to assist students regardless of the level of student achievement

All clinical competency evaluations except continual and terminal evaluations are student-initiated. That is, the student notifies the clinical preceptor of his or her readiness to be evaluated for competency. Students are responsible for managing the timely completion of clinical competency objectives.

It is also the student's responsibility to properly document completion of their trial examinations on Trajecsys and in their Clinical Education Student Handbook. Without positive verification of trials completion, no clinical preceptor will perform competency evaluations in any procedure.

Please note that the Radiography Program may periodically audit student competency records as maintained on Trajecsys and in their Clinical Education Student Handbooks. Discrepancies with respect to the timing of classroom and laboratory instruction and the dates of trials and CCE completion may subject the student to disciplinary action for falsifying student records.

A student who is not successful in completing a clinical competency evaluation will review the areas of deficiency with the clinical preceptor. The student will then be assigned remediation to correct the deficiency by the college faculty.

- Upon completion of review and remediation, the student will be allowed to repeat the minimum number of trial examinations required of the procedure with direct supervision of a licensed radiographer. Upon successful completion of the minimum number of trial examinations, the student will be eligible for clinical competency re-evaluation by a recognized clinical preceptor.

All students are required to perform radiographic and fluoroscopic procedures with some level of supervision. Before competency is demonstrated, students perform with direct supervision (p.49).

Following competency attainment in a radiographic or fluoroscopic procedure, the radiography student can perform the procedure with indirect supervision. This is understood to mean that the licensed radiographer is adjacent to the room where the student performs the procedure. The exception is during portable and operating room imaging. Direct supervision shall be maintained in these two areas.

A student who produces an unsatisfactory radiograph can only repeat the radiograph with direct supervision, regardless of the student's level of competency attainment. Failure to abide by this policy will subject the student to disciplinary action as it violates State of New Jersey regulations and Joint Review Committee on Education in Radiologic Technology accreditation standards.

Please refer to the flow chart for an overview of the clinical competency process used by the Radiography Program.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

CLINICAL COMPETENCY (SPECIFIC REQUIREMENTS)

The goal of clinical competency evaluation is to determine the radiography student's readiness to perform radiographic and fluoroscopic procedures safely and effectively on actual patients at three levels of ability. These three levels are the CCE, continual, and terminal levels and are described in the next section.

The student must follow a prescribed path leading to competency attainment. Successful completion of an evaluation enables the radiography student to perform subsequent radiographic or fluoroscopic examinations with indirect supervision. Unsuccessful evaluation requires remediation, repeat performance of all requisite trial examinations. The student continues to perform the radiographic procedure with direct supervision. Upon completion of the trial examinations, the student can request to be re-evaluated for competency.

All clinical competency evaluations must be completed according to the schedule below. Failure to complete the required clinical competency evaluations by the completion of a clinical course will result in an incomplete grade ("I") in that course with the exception of the final clinical course. To remove the incomplete grade, the student must complete the outstanding clinical competency evaluations, plus all of the clinical competency evaluations required in the next clinical course.

All CCE's MUST be documented on Trajecsyst at the end of each semester by your clinical preceptor or you will need to repeat them the following semester. It is your responsibility to follow up with the clinical preceptors to make sure that the CCE's are documented on Trajecsyst.

Except for circumstances that are clearly beyond the student's control (the validity of such circumstances to be determined by the Radiography Program officials), failure to complete the required clinical competency evaluations a second time will result in an unsuccessful clinical grade and inability to continue into the next term's radiography courses.

All Portable and OR CCE's MUST be completed by the end of the second Spring semester.

All CCE's must be completed by the end of the 2nd summer term, an "I" grade is not assigned in the final clinical course in this instance, the student may follow the readmission procedure.

CLINICAL COMPETENCY COMPLETION SCHEDULE

SEMESTER	INITIAL (MINIMUM)	CONTINUAL (MINIMUM)	ELECTIVE (MINIMUM)	TERMINAL (MINIMUM)	TOTAL
FALL – 1 ST YEAR	3	--	--	--	3
SPRING – 1 ST YEAR	6	1	1	--	8
SUMMER – 1 ST YEAR	5	2	4	--	11
FALL – 2 ND YEAR	6	2	4	--	12
SPRING – 2 ND YEAR	6	2	4	--	12
SUMMER – 2 ND YEAR	4	1	1	1	7
TOTAL	30	8	14	1	53

CCEs (INITIAL COMPETENCY EVALUATIONS)

The initial level of competency attainment in the clinical setting, the CCE is an evaluation of the student's ability to perform radiographic procedures under near-ideal conditions. The procedures evaluated should therefore reflect the relative inexperience of the student, but provide him or her with the opportunity to apply basic positioning, technique selection, patient care, and radiation protection skills in a purposeful systematic fashion. The student initiates the CCEs.

CONTINUAL COMPETENCY EVALUATIONS:

Continual competency evaluations measure the student's ability to demonstrate skills and experience beyond the initial competency level (CCE). In other words, the procedures evaluated at this level are expected to be of a more challenging nature. The clinical preceptor selects the procedures to be evaluated.

ELECTIVE COMPETENCY EVALUATIONS:

Electives are additional procedures that students must perform to become well-rounded radiographers upon graduation. The student initiates these procedures for the purpose of competency evaluation.

TERMINAL COMPETENCY EVALUATION:

One terminal procedure shall be performed after all other categories are completed (CCEs, Continuals, and Electives). The procedure to be done will be selected by the clinical preceptor. The level of difficulty shall be appropriate to measure the student's ability to perform as an entry-level radiographer.

The procedure selected can be any two of the following:

- Fluoroscopy

(Select UGI, BE, Small Bowel Series, Esophagus (Not swallowing dysfunction), Cystography, Myelography,
- Arthrography, ERCP requiring a minimum of one overhead image.)
- TC –Arm Procedure (Orthopedic or Non -Ortho)
- TED Portable Trauma
- Severe Trauma (Extremity, Shoulder, Hip, Pelvis, Cranium Facial, Bones and Spine)
- Comprehensive Skeletal Survey

Policy on the supervision of radiography students

The number of students assigned to the clinical setting must not exceed the number of assigned clinical staff. The student to clinical staff ratio must be 1:1; however, it is acceptable that more than one student may be temporarily assigned to one technologist during infrequently performed procedures.

The JRCERT defines direct supervision as student supervision by a qualified radiographer who:

1. Reviews the procedure in relation to the student's achievement
2. Evaluates the condition of the patient in relation to the student's knowledge
3. Is physically present during the conduct of the procedure
4. Reviews and approves the procedure and/or image. *Supervision is provided only by licensed radiographers and instructors.*

Students must be directly supervised until competency is achieved. Once students have achieved competency, they may work under indirect supervision.

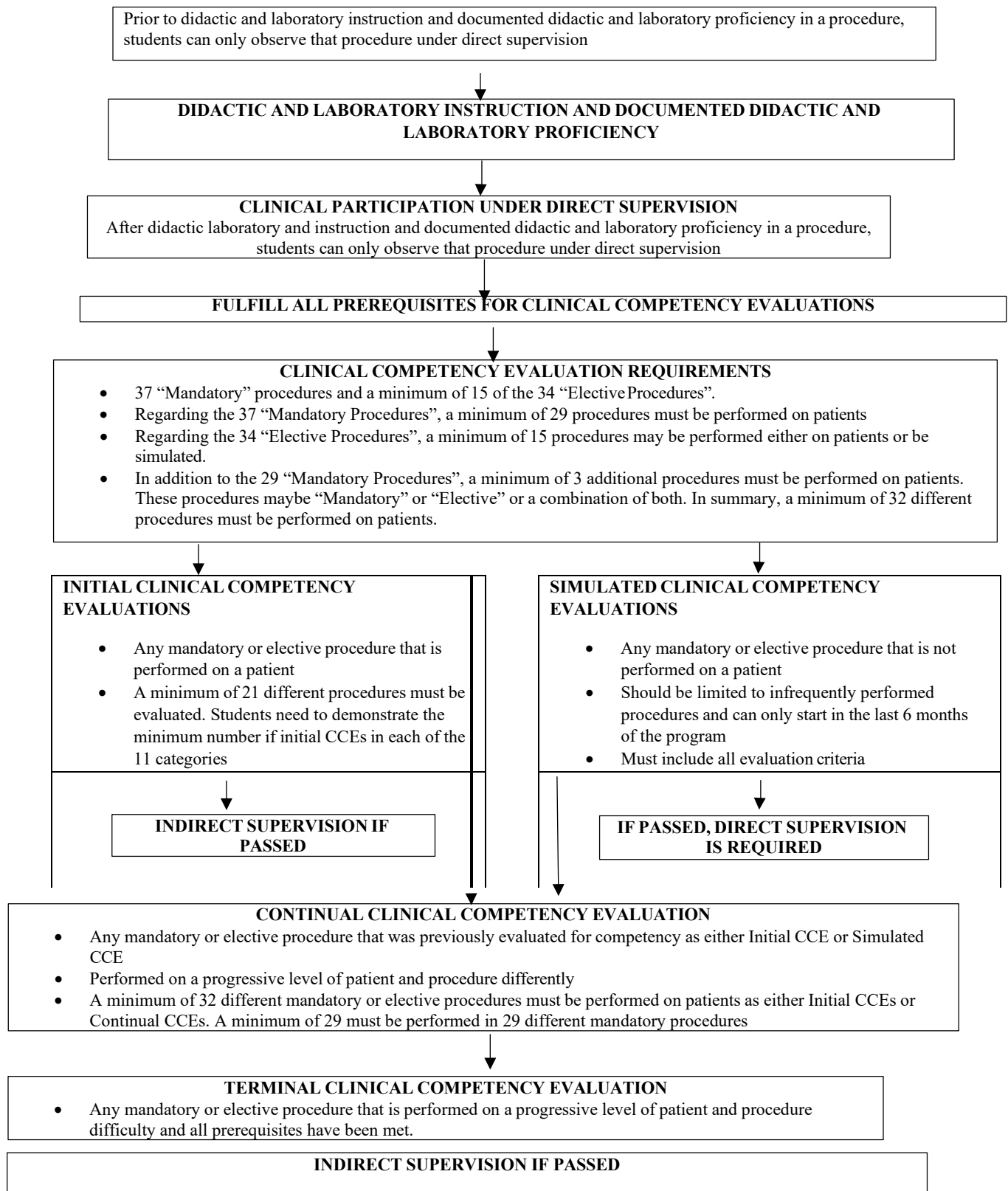
Students must be directly supervised during surgical and all mobile, including mobile fluoroscopy, procedures regardless of the level of competency.

The JRCERT defines indirect supervision as student supervision provided by a qualified radiographer who is immediately available to assist students regardless of the level of student achievement.

Repeat images must be completed under direct supervision. The presence of a qualified radiographer during the repeat of an unsatisfactory image assures patient safety and proper educational practices. Students must be directly supervised during surgical and all mobile, including mobile fluoroscopy, procedures regardless of the level of competency.

Graduate candidates CANNOT supervise second-year students at any level under any circumstances. If a first-year student and a second-year student are assigned to the same room, direct supervision must be maintained if either student has not been deemed competent to perform a given procedure.

Competency Based Clinical Education Flowchart Appendix B



INITIAL CCE: MANDATORY (STUDENT SELECTS ALL 30)

- ABDOMEN SUPINE
- ABDOMEN UPRIGHT
- ANKLE
- AP CHEST (stretcher or wheelchair)
- C-ARM (SURGICAL) (Requiring manipulation around a sterile field)
- C-ARM (Requiring manipulation to Obtain more than one projection)
- CLAVICLE
- CERVICAL SPINE
- CHEST ROUTINE (adult)
- ELBOW
- FEMUR
- FINGER OR THUMB
- FLUOROSCOPY STUDIES (Select two from list below) *
- FOOT
- FOREARM
- GERIATRIC Chest Routine****
- GERIATRIC UPPER OR LOWER EXTREMITY ****
- HAND
- HEAD (Select one from list below) **
- HIP (NON-TRAUMA)
- HUMERUS
- KNEE
- LUMBAR SPINE
- PELVIS
- RIBS
- SHOULDER (NON-TRAUMA)
- THORACIC SPINE
- TIBIA FIBULA
- WRIST
- *Fluoroscopy Studies: (Two Required)
Select UGI, BE, Small Bowel Series,
Esophagus (Not swallowing dysfunction),
Cystography, Myelography, Arthrography, ERCP requiring a minimum of one overhead image.

CONTINUAL CCE: (CLINICAL PRECEPTOR SELECT ALL 8 MANDATORY PROCEDURES)

- PORTABLE ABDOMEN
- PORTABLE CHEST
- PORTABLE UPPER
OR LOWER
EXTREMITY

- TRAUMA SPINE (to include cross-table lateral) (horizontal beam) (pt. recumbent)
- TRAUMA HIP (shoot-through and routine positions) (horizontal beam, pt. recumbent)
- TRAUMA LOWER EXTREMITY
- TRAUMA SHOULDER or HUMERUS (must include scapular Y, transthoracic or axial with routine positions)
- TRAUMA UPPER EXTREMITY (non-shoulder)

ELECTIVE CCE: (STUDENT SELECT 14)

- ACROMIOCLAVICULAR JOINTS
- CHEST ROUTINE (PEDIATRIC***)
- DECUBITUS ABDOMEN
- DECUBITUS CHEST
- GERIATRIC HIP OR SPINE****
- HEAD (other than done as initial CCE)
- INTRAVENOUS UROGRAPHY
- FLUOROSCOPY (other than done as initial)
- CALCANEUS
- NASOGASTRIC/ENTERIC OR OROGASTRIC/ENTERIC TUBE (e.g., Doboff)
- PATELLA
- PEDIATRIC ABDOMEN ***
- PEDIATRIC UPPER OR LOWER EXTREMITY***
- PEDIATRIC PORTABLE***
- SACROILIAC JOINTS
- SACRUM and/or COCCYX
- SCAPULA
- SCOLIOSIS SERIES
- SOFT TISSUE NECK (UPPER AIRWAY)
- STERNUM
- STERNOCLAVICULAR JOINTS
- THORACOLUMBAR SPINE
- TOE(S)

**Select one from among the following: Skull, Sinuses, Facial Bones, Orbits, Nasal Bones, Mandible, TMJ's

***Pediatric patients (age 6 years or younger)

CLINICAL COMPETENCY TRIALS COMPLETION CHECKLIST

Once all classroom and laboratory testing have been completed successfully on a given radiographic or fluoroscopic procedure, the student proceeds to observe that same procedure in the clinical setting. After several examinations have been observed, the student can request to be evaluated on a practice (trial) basis. The checklist below is used to track the successful completion of all trial examinations.

INITIAL CCE	TRIAL #1	TRIAL #2
ANKLE		
AP CHEST (STRETCHER- WHEELCHAIR)		
CERVICAL SPINE		
C-ARM (SURGICAL) (Requiring manipulation around a sterile field)		
C-ARM (Requiring manipulation to obtain more than one projection)		
CHEST ROUTINE (ADULT)		
CLAVICLE		
ELBOW		
FEMUR		
FINGER OR THUMB	☐ Finger ☐ Thumb	☐ Finger ☐ Thumb

FLUOROSCOPY STUDIES (Select two from list above) * List imaging procedure 1. 2.	Imaging Procedure	Imaging Procedure
FOOT		

INITIAL CCE	TRIAL #1	TRIAL #2
ABDOMEN SUPINE		
ABDOMEN UPRIGHT		
LUMBAR SPINE		
PELVIS		
RIBS		
SHOULDER (NON- TRAUMA)		

THORACIC SPINE		
TIBIA-FIBULA		
INITIAL CCE	TRIAL #1	TRIAL #2
FOREARM		
HAND		
GERIATRIC CHEST		
GERIATRIC UPPER OR LOWER EXTREMITY		
HEAD (Select one from list above)**		
HIP (NON-TRAUMA)		
HUMERUS		
KNEE		
WRIST		

ELECTIVE CCE	TRIAL #1
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	

12.	
13.	
14.	
15.	
16.	
17.	
18.	
19.	
20.	
21.	
22.	
23.	

24.	
25.	
26.	
27.	
28.	
29.	
30.	
31.	
32	
33.	
34.	
35.	

36.	
37.	
38.	
39.	
40.	

CLINICAL COMPETENCY COMPLETION CHECKLIST

To assist you in monitoring the successful completion of competency evaluations, you should list the completion of each evaluation and the clinical preceptor who evaluated you. This will enable you to see your progress and avoid re-testing on procedures for which you were already deemed competent to perform with indirect supervision. You are responsible for verifying your CCEs on the list below are documented on TRAJECSYS weekly. Follow up with your clinical preceptor followed by the Radiography Clinical Coordinator regarding any discrepancy.

CCEs	DATE COMPLETED	EVALUATOR
ABDOMEN SUPINE		
ABDOMEN ERECT		
ANKLE		
AP CHEST: (STRETCHER/WHEELCHAIR)		
CERVICAL SPINE		
C-ARM (SURGICAL) (Requiring manipulation around a sterile field)		
C-ARM (Requiring manipulation to obtain more than one projection)		
CHEST ROUTINE (ADULT)		
CLAVICLE		
ELBOW		
FEMUR		
FINGER or THUMB		
FLUOROSCOPY IMAGING PROCEDURE		
FLUOROSCOPY IMAGNG PROCEDURE		
FOOT		
FOREARM		
GERIATRIC CHEST		
GERIATRIC UPPER OR LOWER EXTREMITY		
HAND		
HEAD IMAGING PROCEDURE		
HIP (NON-TRAUMA)		
HUMERUS		
KNEE		
LUMBER SPINE		
PELVIS		
RIBS		
SHOULDER (NON-TRAUMA)		

THORACIC SPINE		
TIBIA-FIBULA		
WRIST		

CLINICAL COMPETENCY COMPLETION CHECKLIST, CONTINUED
CONTINUAL COMPETENCY EVALUATION

CONTINUALS	DATE	EVALUATOR
PORTABLE ABDOMEN		
PORTABLE CHEST		
PORTABLE UPPER OR LOWER EXTREMITY		
TRAUMA HIP (shoot-through) (horizontal beam) (pt. recumbent)		
TRAUMA LOWER EXTREMITY		
TRAUMA SHOULDER or Humerus (scapular Y, transthoracic, or axillary)		
TRAUMA SPINE (horizontal beam) (pt. recumbent)		
TRAUMA UPPER EXTREMITY (non-shoulder)		

ELECTIVE COMPETENCY EVALUATIONS

ELECTIVES	DATE	EVALUATOR
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		

TERMINAL COMPETENCY EVALUATION

TERMINAL	DATE	EVALUATOR
1.		

RULES FOR COMPLETION OF CLINICAL COMPETENCY EVALUATIONS

- **Trial examinations** should be completed in either a CCE, or elective category following successful completion of the same procedures in the laboratory setting. Trial examinations in procedures that require inclusion of associated positioning such as that of the knee may be credited to more than one procedure if performed successfully. For example, if the patella requires the inclusion of routine knee positions as required by department protocol, completion of the trial examination will be credited to both the patella and routine knee.
- **Trial examinations** for the HEAD category may be performed on any head examination that is similar to that of the CCE and of the similar degree of proficiency.
- The initial CCE must be completed prior to completing the relevant continual or elective CCE. For example, in chest radiography (PA and lateral) should be completed **first** before a portable chest (continual CCE) and decubitus chest (elective CCE).
- A competency evaluation in an elective or continual procedure must include all related positioning as part of the evaluation. For example, if the os calcis (an elective) requires completion of the ankle routine (a CCE), then the elective competency evaluation will include evaluation of the ankle positions. If the elective competency evaluation in abdomen decubitus positions includes routine positions of the abdomen, then the elective competency evaluation must include those positions as well. For this reason, **competency testing in an elective procedure containing positioning required for a CCE cannot take place unless all trial examinations for the elective and CCE have been completed.**
- If a student is competency testing in an elective procedure where department protocol requires positioning found in the list of required CCEs, that student may be able to claim dual completion of a continual and a CCE. For example, department protocol may require the completion of a chest PA and lateral (a CCE) along with chest decubitus radiographs (an elective) in certain hospitals. If this is the case, successful competency performance in both chest PA and lateral, and chest decubitus positions will enable the student to complete the chest CCE and elective competency in chest decubitus **on condition that the trials for both chest CCE and chest decubitus have been completed prior to competency attainment.** Likewise, should department protocol require the completion of an ankle routine along with the os calcis positions, successful competency attainment will enable the student to claim a CCE in the ankle and an elective competency in os calcis. Again, dual competency is conditioned on prior completion of all of the requisite trial examinations. The same may apply to shoulder initial CCE and the trauma shoulder continual competency evaluations. Students should consult the protocol handbooks in their respective clinical education centers or speak to their clinical preceptors.
- All trial examinations in simulated procedures must be performed on patients.
- A continual competency evaluation in portable upper and lower extremity radiography can be initiated by a clinical preceptor in a procedure completed by the student at the initial CCE level as of the first summer term. The clinical preceptor shall use discretion in the timing of the continual competency in order to give the student as much practice with portable upper and lower extremity prior to competency evaluation.
- "One patient may be used to document more than one competency. However, each individual procedure may be used for only one competency (e.g., a portable femur
- can only be used for a portable extremity or a femur but not both)"

COMPETENCY EVALUATION FORM

Student _____ Date _____

Examination _____ Evaluator _____, RT

CCE _____ Continual _____ Elective _____ Terminal _____

Instructor:

Does patient require catheters, tubing or medical devices? (See A6 below) YES _____ (initial)

Did student verify trials completion by evidencing properly initialed or signed documentation contained in his/her handbook? YES _____ (initial)

DO NOT PROCEED WITHOUT VERIFICATION! Total Score _____

PART A. EXAMINATION PREPARATION AND PATIENT CARE (25 PTS)

1. Prepare room with appropriate supplies and equipment
2. Communicate procedure protocol to CI
3. Identify patient professionally in accordance with hospital protocol*
4. Evaluate requisition for clinical information*
5. Obtain accurate clinical history
6. Explain procedure clearly & accurately in accordance w/hospital protocol
7. Assist patient onto table and/or into required position(s)*
8. Provide post-procedure instructions
9. Explain the procedure completion process to CI
10. Control panel set up
11. Overall speed and efficiency

YES	NO	N/A

FORMULA: (# checked "YES" plus "N/A" ÷ 11) x 25 = _____

PART B. RADIOGRAPHIC EQUIPMENT (25 PTS)

1. Control panel settings
2. Central ray alignment with image receptor
3. SID
4. OID
5. Angulation
6. Collimation, size, and orientation*
7. Marker placement
8. Equipment manipulation

AP	PA	OBL	OBL	LAT

FORMULA: (# correct ÷ # possible) x 25 = _____

PART C. RADIOGRAPHIC POSITIONING (25 PTS)

1. Radiographic position per department protocol
2. Central ray location
3. Positioning aides
4. Pre-exposure instructions
5. Gonadal Shielding*
6. Post-exposure instructions

AP	PA	OBL	OBL	LAT			

FORMULA: (# correct ÷ # possible) x 25 = _____

PART D. IMAGE EVALUATION (25 PTS)

1. Positioning
2. Marker placement/Correct patient ID
3. Brightness and contrast
4. Spatial resolution/size & shape distortion
5. Identify radiographic anatomy
6. Corrective measures
7. Analysis of EI/ DI/or S Number

AP	PA	OBL	OBL	LAT			

FORMULA (# correct ÷ # possible) x 25 = _____

1. Failure to safely perform, or correctly perform, objectives labeled with (*) will result in automatic termination of the competency evaluation and will require remediation, and performance of requisite trial examinations before another competency evaluation is initiated in the same procedure.
2. A minimum grade of 85% is needed to pass the competency evaluation.

PRECEPTOR'S SIGNATURE _____, RT

STUDENT'S SIGNATURE _____

COMMENTS:

PART A. EXAMINATION PREPARATION AND PATIENT CARE (25 POINTS)

1. Stock procedure room as needed with towels, linen, positioning aides, image receptors, medication and contrast media in anticipation of the procedure to be done. Exercise handwashing and correct technique when opening sterile packs as required for specific invasive procedures such as myelography and arthrography.
2. Communicate proper procedure protocol to CI.
3. Clearly and pleasantly identify self and confirm identity of patient verbally and visually using at least two forms of ID. Properly screen female patients for pregnancy and onset of last menstrual period. Document pregnancy status in accordance with radiology department requirements.
4. Identify the procedure to be done, including radiographic positions to be taken. Ensure that correct side has been ordered (e.g., left hand vs. right hand, etc.).
5. Obtain accurate clinical history from patient.
6. Instruct the patient on proper gowning and removal of jewelry. Assist patient with gowning as appropriate. Explain procedure accurately, including breathing instructions before and after exposure. Speak in a clear, audible (not loud) tone of voice.
7. Take all appropriate steps to ensure the safe performance of radiographic positioning such as using side rails, stretcher/ wheelchair locks and step stools. Use immobilizing devices consistent with hospital policy. Assist patient into correct radiographic position as needed without undue physical manipulation.
8. Following procedure, provide post-procedure instructions and/or directions for follow-up as needed. Make sure that the control desk is informed of the patient's readiness to be returned to the floor or unit.
9. Explain the procedure completion process to CI.
10. Establish initial control panel settings for procedure
11. Expedite the completion of the radiographic procedure in as safe and efficient a manner as possible given the level of student experience and patient difficulty.

PART B. RADIOGRAPHIC EQUIPMENT (25 POINTS)

1. Correctly utilize all controls needed to establish the correct exposure factors of kVp and mAs. When required, make appropriate selection of photo cells needed to properly expose a radiograph using AEC. Select controls to correctly activate photo cells (table or chest stand) when AEC is required to expose radiograph. Ensure the activation of the table grid device before exposing radiographs utilizing the reciprocating bucky.
2. Position the x-ray tube so that the central ray is in correct alignment with the image receptor and bucky grid device and when required.
3. Set the correct distance that the x-ray tube is from the image receptor.
4. Select the correct distance that the patient is from the IR.

5. Apply correct tube angle in order to compensate for obscuring anatomy or the effects of excessive elongation or foreshortening.
6. Apply an x-ray field of exposure that will include the area of interest, but not exceed the dimensions and orientation of the film cassette used.
7. Proper marker placement.
8. Use only those locks and buttons that will enable the x-ray tube, radiographic table and chest stand to be adjusted without damage to equipment or injury to self or patient.

PART C. RADIOGRAPHIC POSITIONING (25 PTS)

1. Place the patient in the correct radiographic position as determined by department protocol.
2. Direct the central ray to the midpoint of the anatomy under consideration.
3. Using sponges, tape, linen and any other devices as appropriate to ensure accurate positioning and patient comfort during the procedure
4. Giving correct breath-hold instructions (stop on inhalation, exhalation or apply shallow breathing) and instructing the patient to hold still prior to exposure.
5. Applying gonadal shielding on all patients of reproductive capacity or younger.
6. Instructing the patient to breathe following radiographic exposure and instructing the patient on the next steps to be taken during and post procedure.

PART D. IMAGE EVALUATION (25 PTS)

The clinical preceptor will evaluate the student to determine the degree to which s/he can analyze the resulting radiographs with respect to the following:

1. Correctly identify the images taken as displayed on a viewing monitor. Determine the adequacy of positioning for each image and whether a repeat is warranted based on departmental protocol.
2. Determine if the correct marker has been used and if the marker is obscuring relevant anatomy in accordance with department protocol. Determine if the correct patient identification is contained on the image(s).
3. Evaluate radiographic brightness and contrast to determine whether the visibility of detail and the brightness differences between adjacent structures is acceptable.
4. Determine how the use of exposure time, focal spot size, SID or OID has contributed to increased or decreased image sharpness. Determine how tube angle may have contributed to increased or decreased image elongation or foreshortening effects, if any.
5. Correctly identify radiographic anatomy.

6. Identify corrective measures needed to improve any of the deficiencies identified in items 1, 2, 3 and 4.
7. Determine the acceptability of ionizing radiation detected by the image receptors in accordance with departmentally established target ranges for exposure index numbers (I), log median numbers (LgM), or sensitivity (S) numbers. Determine corrective measures that might be needed in order to bring these values to within the acceptable range.

Failure to safely perform, or correctly perform, objectives will result in automatic termination of the competency evaluation and will require remediation, and performance of requisite trial examinations before another competency evaluation is initiated in the same procedure.

A minimum grade of 85% is needed to pass the competency evaluation.

INSTRUCTOR'S SIGNATURE _____, RT

STUDENT'S SIGNATURE _____

COMMENTS:

CLINICAL COMPETENCY EVALUATION -- OPERATING ROOM

STUDENT _____ DATE _____

EVALUATOR _____ HOSPITAL _____

EXAMINATION _____

INITIAL ☐ INITIAL ☐ TERMINAL GRADE
(C-ARM SURGICAL) (C-ARM SURGICAL) ☐

(Requiring manipulation around
a sterile field)

(Required manipulation to obtain
more than one projection)

THE STUDENT SHALL DEMONSTRATE COMPETENCY IN THE O.R. BY:	YES	NO	N/A
1. BEING PROPERLY DRESSED FOR OR			
2. COMMUNICATING EFFECTIVELY WITH SURGEON			
3. C-ARM COMPONENTS ASSEMBLE			
4. LOCATING THE MAIN POWER SUPPLY SWITCH			
5. POSITIONING C-ARM FOR PROCEDURE			
6. SETTING THE CONTROL PANEL CORRECTLY			
7. DATA/IMAGE MANAGEMENT			
8. MANAGE HARDCOPY IMAGES AS NEEDED			
9. DISASSEMBLE & STORING OF EQUIPMENT			

To pass, student must have no less than 9 "YES," or a combination of 9 "YES" and "N/A"

checked.

Evaluator Comments:

Evaluator's Signature

Date

Student Comments:

Student's Signature

CLINICAL COMPETENCY OBJECTIVES: C-ARM PROCEDURE

The radiography student will demonstrate competency in the operating room by demonstrating the ability to:

- Know where the changing room is. Wear the appropriate operating room attire and use mask, hair cap and shoe covers. Wear lead protective apron when x-rays are generated and wear a radiation monitoring device on the outside of the apron near the neck.
- Determine through verbal communication with the operating room staff, what type of examination is required. Interact with all operating room staff in a courteous and cooperative manner.
- Assemble the cables and connectors to the C-arm and image monitor. Have the necessary image cassettes ready. Place fluoro pedal within reach of the surgeon. Place the image monitor in the proper viewing position.
- Locate the main switch to the power supply and outlet if using the C-arm or AC- operated portable unit. Locate the main switch for stationary O.R. unit.
- Evidence regard for sterile technique by ensuring that the operating room staff cover the image receptor or x-ray tube with a sterile plastic covering before the device is positioned over the surgical site. Position the x-ray unit on the proper side of the operating table. Properly manipulate C-arm in order for the surgeon to see the desired anatomy in the desired orientation (not upside down or reversed).
- Demonstrate knowledge of radiographic technique by selecting the appropriate exposure factors to produce diagnostic quality radiographs. Produce the desired level of fluoroscopic image brightness and contrast by the judicious use of the fluoroscopic control features.
- Ensure that acquired images are saved and displayed as needed and that patient information is correctly associated with the images
- Annotate and print hardcopy images as needed.
- Disassemble and clean the radiographic equipment after the procedure. Store equipment as applicable.

CLINICAL COMPETENCY REMEDIATION COMPLETION FORM
(TO BE COMPLETED BY COLLEGE FACULTY)

☐ CCE ☐ CONTINUAL ☐ TERMINAL ☐ ELECTIVE

STUDENT _____ DATE _____

EXAMINATION _____

- A. EVALUATIONS ATTEMPTED AT THE LEVEL INDICATED ABOVE: _____
- B. HAS REMEDIATION BEEN COMPLETED? ☐ YES ☐ NO
- C. RE-EVALUATION TO TAKE PLACE AT THE _____ LEVEL
- D. FACULTY MEMBER'S SIGNATURE _____

(TO BE COMPLETED BY STUDENT AND RADIOGRAPHY STAFF/INSTRUCTORS)

	<u>PATIENT ID #</u>	<u>HOSPITAL SITE</u>	<u>DATE</u>	<u>INITIALS</u>
TRIAL #1	_____	_____	_____	_____
TRIAL #2	_____	_____	_____	_____

TO THE STUDENT

WHEN REMEDIATION IS COMPLETE, TWO TRIAL EXAMINATIONS WITH DIRECT SUPERVISION ARE TO BE PERFORMED.

UPON COMPLETING THE TRIAL EXAMINATIONS, YOU WILL BE ELIGIBLE TO BE EVALUATED FOR COMPETENCY AT THE INDICATED LEVEL (ITEM C).

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

Exam Administration Procedure

Purpose: To ensure secure conditions for exam administration.

Procedure: **Pertaining to both in-person and online testing**

1. All personal articles must be removed from the student's testing space.
2. Unless an accommodation has been approved for disability reasons or by the course instructor, students may not bring personal testing earplugs, ear buds, or headphones. Students must request this at least 24 hours advance of a test. Earlobes must be visible at all times.
3. Students must abide by the college's academic integrity policies and may not access any educational, clinical, test preparation, or study materials during the exam.
4. Students may not use personal calculators unless approved by the instructor. The exam proctor will make calculators available in-person or a calculator may be available on the computer if taking an online exam.
5. Students may not have any personal items at the desk or on their person. All personal items including the following devices will be kept in a personal belonging and placed next to their seat: cell/mobile/smart phones (OFF), tablets, smart watches, MP3 players, fitness bands, jump drives, cameras, or other electronic devices. **Online:** Students will be asked to confirm that they do not have a cellphone and if they do, to show the camera that they are powering it off/silencing and placing it in the back of the room.
6. Students may not wear watches. A timer will be displayed/notification of time remaining will be provided during the exam period.
7. Coats, hats, hoods (included hooded sweatshirts), scarves, and gloves are not permitted to be worn during testing except for religious or medical reasons. Students may be required to expose their ears to the proctor.
8. Students are permitted to have extra pencils, erasers, colored pens, and/or highlighters. Students may bring an erasable whiteboard 8.5" X 11" or smaller to use during the exam, faculty must observe it being wiped clean at exam completion. Adhesive notes, flags, or scrap paper are not permitted.
9. Students are not permitted to have food, gum, or, candy. Beverage containers are permitted and will be checked by the faculty prior to the exam.
10. Students are not permitted to have medical aids, devices, or lip balm.
11. Students may not read out loud questions and/or answers during an exam, whether in person, at the testing center, or remotely proctored.

12. Students will not disclose or discuss information about the items or answers seen on exam/test/quiz unless it is during a formal test review with the course faculty. This includes posting or discussing questions on the internet, via text message and/or via social media websites.
13. Students may not copy or reconstruct exam items during or following the exam for any reason.
14. Students may not seek help from any other party in answering items (in person, by phone, text, or by email) during the exam/test/quiz (including breaks).
15. Students may not remove exam/test/quiz items and/or responses (in any format) or notes about the exam/test/quiz from the testing room. You may also NOT take a screenshot at any point in time during or even after completing an online exam.
16. Students will comply with any investigation related to exam integrity that needs to be conducted.
17. Students may not take the exam/test/quiz for somebody else.
18. Students may not tamper with the computer or use it for any function other than taking the exam/test/quiz.
19. The exam proctor is to walk about the room while the exam is in progress. If remote proctoring is used, the student must comply with the requirements of the remote proctoring process/program.
20. There is to be no talking or other communication between students and/or faculty during the examination. No questions will be answered during the exam (except in an extenuating circumstance).
21. Students who sit for an exam are indicating that they are physically and mentally able to take the exam. If testing with accommodations, submission of the exam indicates that the student's testing accommodations were met.
22. Students who arrive more than ten minutes after testing has begun may not be permitted to test that day.
23. Students who begin the exam late will follow the proctor's exam timer and will not have the full time for the exam.
24. Any student who does not abide by the above may receive a "0" for that exam.

Effective Date: September 26, 2023

Revised: 1/30/24

Approved by:

Sandra L. Kerr, M.A. R.T. (R), Professor
Radiography Program Coordinator

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

RADIOGRAPHY STUDENTS AS HEALTH CARE EMPLOYEES

Radiography students employed in a hospital, physician's office, diagnostic imaging center, clinic or any other health care facility in the State of New Jersey are prohibited from performing any procedure employing the use of x-rays or other ionizing radiation. This includes any pre-exposure patient positioning, measuring, x-ray equipment manipulation and triggering an exposure, even if supervised by a licensed radiographer.

Ordinary patient care tasks such as assisting patients onto or off of a radiographic table, or processing radiographic film are acceptable. Students found to be in violation of State licensing requirements are subject to civil penalties and risk ineligibility for licensing in New Jersey as diagnostic radiologic technologists.

While attending State-approved schools, students can use x-rays under a student exemption in the law without holding a license so long as they are under the direct supervision of a licensed radiographer and it can be demonstrated that the assignments are for educational purposes. This student exemption applies only to recognized clinical facilities of the college.

NOTE: THE PROHIBITION ARTICULATED ABOVE ALSO APPLIES TO THOSE WHO ARE NOT EMPLOYED IN A FACILITY UTILIZING IONIZING RADIATION. IT IS A VIOLATION OF PROFESSIONAL ETHICS AND ALSO AN ILLEGAL ACT TO ENGAGE IN THE PERFORMANCE OF RADIOLOGIC TECHNOLOGY WITHOUT A LICENSE.

THOSE STUDENTS FOUND TO BE IN VIOLATION OF THE NEW JERSEY RADIOLOGIC TECHNOLOGY ACT OF 1968 UNDER ANY CIRCUMSTANCES WILL BE DISMISSED FROM THE RADIOGRAPHY PROGRAM.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

STATE LICENSING AND ARRT CERTIFICATION

Licensing requires the administration of an examination to measure the knowledge and intellectual capacity underlying the competent performance of radiologic technology. The State of New Jersey relies on the examinations administered by the American Registry of Radiologic Technologists (ARRT) for licensing purposes.

Founded in 1922, the ARRT is a non-profit, non-governmental agency whose purpose is to identify and certify those individuals who meet the educational and training needed to safely and effectively utilize radiation in diagnostic and therapeutic radiologic technology.

Those applying for a license to practice in New Jersey must be certified by the ARRT with current registration. Application forms are available through the State of New Jersey <http://www.state.nj.us/dep/rpp/tec/downloads/rtlp.pdf>.

To apply for a license to practice diagnostic radiography in New Jersey, the applicant must submit the following to the NJ Bureau of Radiological Health:

- Copy of MCCC diploma or a letter of program completion signed by the Radiography Program coordinator
- Copy of ARRT certification, and
- The NJ license application and applicable fee.

The ARRT radiography examination should be taken as soon as possible following program completion in order to obtain a license for purposes of employment. Please consult with the Radiography Program coordinator before application is made.

The licensee will also be awarded a certificate of registration directly from the ARRT. This certificate is not a license, but is an important document attesting to having met the standards of this national certifying organization.

ARRT certification may be useful if employment is sought in non-license states or where licensing in other states depends on ARRT certification.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

THE IMPORTANCE OF LICENSING IN RADIOLOGIC TECHNOLOGY

Until the licensing requirement went into effect in New Jersey with the passage of the Radiologic Technology Act of 1968, there was nothing to prevent anyone, no matter how inadequately prepared, from applying x-rays on human beings. Many completely untrained persons were hired and trained on-the-job to be radiologic technologists. Often these persons began as unpaid “volunteers” or in positions such as hospital aide or attendant.

Many others were trained to be radiologic technologists at commercial schools where they obtained no clinical experience. Those who trained at hospitals and clinics received no formal classroom instruction.

Those in occupations such as nursing, medical technology or medical assisting were also taking x- rays. Their training in radiologic science was either incidental or non-existent. They generally worked in the private offices of physicians who were not radiologists. A number even worked for self- proclaimed “x-ray laboratories.”

Compliance with the standards of training and learning promoted by such organizations as the American Society of Radiologic Technologists was entirely voluntary before 1968. While many radiologists and some hospital radiology departments did insist that their technologists meet those standards, there was nothing to prevent other departments and physicians from using unqualified personnel.

ETHICS DISCLOSURE REQUIREMENT

Applicants for board certification or state licensure as diagnostic radiographers are expected to be of sound moral character. Conviction of a felony or misdemeanor, with exception of certain motor vehicle offenses, must be disclosed. Failure to disclose convictions – even where the adjudication of guilt was not entered or withheld – could result in denial or revocation of certification and/or licensure. Please refer to details contained in documents received from the respective certification and/or licensing board with respect to pre-application or eligibility review.

Simply enrolling and completing a radiography course of study at another school does not relieve the applicant of the duty to report previously sanctioned violations.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

VOLUNTARY REFERENCE AUTHORIZATION

Students have certain privacy rights under the Family Educational Rights and Privacy Act (FERPA a.k.a “Buckley Amendment”). These rights relate to who may have access to an individual’s “educational records.” These records are intended for internal college use and are available to faculty, professional staff, and accreditation agencies on a need-to- know basis.

I, , hereby grant the faculty of the Mercer County Community College Radiography academic program to faithfully and honestly act as reference to my work as a student. Any information concerning my verification of attendance, confirmation of graduation, academic work, professional image and behavior, clinical skills, attitude, or any job-related attributes may be communicated in reference situations. These reference situations may include job applications, college admission applications, and other situations where a reference check is required. It is understood that college faculty completing such a reference have my authorization to provide an honest and complete appraisal of my work by accessing my “educational records.”

My signature on this form is an acknowledgement of my voluntary permission for such college faculty to disclose this information.

(Student’s Printed Name)

(Student’s ID)

(Student’s Signature)

(Date Signed)

(Faculty Signature Providing Recommendation) (Date Signed)

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

PROGRAMMATIC ACCREDITATION

The Joint Review Committee on Education in Radiologic Technology (JRCERT, 20 North Wacker Drive, Suite 2850, Chicago, IL, 60606-3182; 312-704-5300; <https://www.jrcert.org> and the NJ Radiologic Technology Board of Examiners <https://www.state.nj.us/dep/rpp/> accredit the Radiography Program at Mercer County Community College.

This means that the Program meets certain minimum standards of quality and assures the public of its role in preparing and graduating radiographers who can administer ionizing radiation in a safe and effective manner.

A copy of the current JRCERT Standards for an Accredited Educational Program in Radiography is included with the distribution of this Handbook. The Standards and programmatic accreditation will be discussed in the mandatory radiography orientation sessions and RAD 102 Introduction to Radiography and Patient Care (Fall I).

Additional student-specific information can be found by going to: <https://www.jrcert.org/students>.

The Radiography Program's program effectiveness data is available on the radiography website <https://www.mccc.edu/radiography/> and the JRCERT website <https://www.jrcert.org/programs/mercercountycommunitycollege/>

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

STUDENT CLINICAL HANDBOOK ACKNOWLEDGMENT OF RECEIPT

I, _____ have received a copy of the Mercer County

Community College Radiography Program Clinical Education Student Handbook, and a current copy of the Standards for an Accredited Educational Program in Radiography published by the Joint Standards for an Accredited Educational Program in Radiography published by the Joint Review Committee on Education in Radiologic Technology.

I will use them in order to better understand my role as a radiography student and as a guide to success in my clinical education. If there is any topic that is not clear to me, I will seek an explanation from a Radiography Program faculty. I will otherwise abide by the policies therein contained to the best of my ability.

Student Signature

Date

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

Background Check Procedure

Purpose: To define a fair, consistent process in criminal background check procedures across the health professions.

Procedure:

1. All students who are accepted into the professional phase of health profession program with a clinical component are required to undergo a criminal background check which may include a check of sex offender registries and Medicare exclusion program. This may also apply to non- application based health profession programs with a field component.
2. Students will not be asked to submit to the background check until after they have been accepted to the program and/or registered for class.
3. The health profession program will designate a time frame and process for completion of the background check.
4. The student is responsible for any fees associated with conducting the background check.
5. Background checks may be required annually, as part of the student's continued participation in a health profession program.
6. The Vice President for Student Services will review all background status checks, based on a list provided by the health profession program coordinators.
7. Any misdemeanor or felony offenses within the past seven years will make the student ineligible to participate in the health professions program. Misdemeanor traffic offenses are excluded, with the exception of driving under the influence.
8. Felony charges older than seven years may make the student ineligible to participate in the health professions program. Cases will be evaluated on an individual basis by the Vice President for Student Services and the Dean of Math, Science, & Health Professions. Students may be asked to submit additional documentation for evaluation. The outcome of all individual reviews will be made known to the health profession program coordinator.
9. Pending charges on a background check may make the student ineligible to participate in the health professions program. It is preferred that students defer their admission to an application based program until the charges are resolved. Cases will be evaluated on an individual basis by the Vice President for Student Services and the Dean of the Health Professions. Students may be asked to submit additional documentation for evaluation. The outcome of all individual reviews will be made known to the health profession program coordinator.
10. If a student has been identified as ineligible to participate in the health professions program, The Vice President for Student Services will contact and inform the student that he or she is ineligible to participate in the health professions program at this time.
11. The Vice President for Student Services will notify the health profession program coordinator in writing, with the names of the students ineligible to participate in the health professions program, without revealing the nature of the infraction.
12. In the event that a repeat background check has new information, it will be evaluated on a case by case basis by the Vice President for Student Services and the Dean of the Health Professions. Depending on the nature of the offense, the student may not be able to continue in the health profession program. The outcome of all individual reviews will be made known to the health profession program coordinator.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

Student Impairment and Medical Emergency Procedure

Background

Students in the health professions are considered to be working in a safety sensitive occupation when dealing with patients, clients, or other students in the clinical, field, or lab environment. Each individual is responsible for assessing their own fitness for duty. In the event that a student presents for a clinical, field, or lab experience and is identified as impaired by the clinical preceptor or field supervisor, the following actions are to be taken. A student medical emergency should be treated in the same fashion. Examples of student medical emergencies include but are not limited to: syncope (passing out), vomiting, or seizures.

Impairment is defined behaviorally, as different from the normal behavior of the student.

Examples of behavior that indicate impairment include but are not limited to:

- Decreased level of alertness, drowsiness
- Disorientation to person, place, time, or events
- Auditory or visual hallucinations, as evidenced by student report or observed behaviors
- Slurred speech or inability to talk
- Impairment in motor skills, e.g., unable to stand, walk, or balance
- Any other behaviors that can be seen or heard to be disruptive to the learning and/or healing environment, unresponsive to redirection

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

Student Impairment and Medical Emergency Procedure

Procedure

If a student is deemed impaired or has experienced a medical emergency, the instructor should take the following actions:

- Offer to assist student in obtaining emergency medical assistance, e.g., activate emergency medical services (call 911 and/or campus security) or escort student to an on-site emergency department, where available.
- If student declines emergency medical assistance, dismiss the student to home using the steps below.
- Student may not drive themselves. Students must contact a legal adult to provide them with a ride home. The instructor must visualize the student and adult driver.
- If the student does not have a legal adult available to drive them home, the instructor may arrange for a taxi ride home. The cost of the taxi ride will be charged to the student account.
- Clinical preceptors/employees/MCCC staff may not drive students home or to medical services.
- Clinical preceptors / field supervisors must notify the program/clinical coordinator as soon as possible after occurrence. A written notification must follow to include a detailed description of the incident and actions taken.
- The program/clinical coordinator will follow-up with the student to determine if additional support services are needed for student success.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

Student Standards of Conduct

Purpose

To support an atmosphere of growth and facilitate meaningful learning activities while maintaining unwavering ethical standards, honesty, integrity and professional competence. All Mercer students must adhere to the MCCC Student Code of Conduct. However, this document details additional Standards of Conduct that apply to students in professional programs in which highest standards of honesty, integrity and competence are demanded. This Code does not replace professional judgement and is not all inclusive. It is a framework for understanding and guiding acceptable behaviors.

It is expected that every student adheres to these guidelines and maintains professional conduct in all academic and clinical settings or affiliations as a student representing MCCC.

Procedure

1. All actions by students must represent the Division in a positive manner and indicate that the student was acting in an honest and professional manner. Any actions that potentially indicate a lack of integrity in professional matters is considered a violation of professional ethics.
2. Any MCCC student, faculty, or staff observing a violation of this code by a health professions student should report the incident to the program coordinator or Division Dean as soon as possible.
3. The program coordinator and/or Division Dean will review each incident. If substantiated, the incident will result in a written student action plan. This action plan may include additional coursework, written assignments, or other consequences appropriate to the violation.
4. A report of student misconduct about these standards may also initiate a process that could lead to student dismissal from the health professions program. Violations of federal, state and local laws may be applicable and would be reported to law enforcement as appropriate.
5. Respectful and professional language is to be used when interacting with faculty, staff, peers, patients, and others.
6. Civil, polite, reasonable, and respectful behaviors are to be exercised in all professional, academic, and therapeutic relationships. Disagreements are to be handled directly with the other party and reported to an appropriate third party if mediation is necessary.
7. The following list includes student prohibited behaviors towards any MCCC faculty, MCCC staff, clinical facility staff, or other MCCC students:
 - a. Creating or contributing to an unsafe and/or unhealthy learning environment; demonstrating behaviors that interfere with the learning of other students and the conduct of class.
 - b. Malicious, aggravated, injurious, intimidating, or threatening or bullying behaviors.
 - c. Demonstrating an injurious, offensive, demeaning, intimidating, threatening, belittling, coercing, disrupting, and/or abusive disposition.
 - d. Harassment or any behavior that creates a hostile or intimidating environment in which verbal or physical contact, because of its severity or persistence, is likely to significantly interfere with an individual's work or education. This includes sexual harassment through physical contact, verbalizations, gestures, electronic or non- electronic media, and illustrations/graphics.
 - e. The use of physical force or violence to restrict the freedom of action or movement of another person.

- f. Physical behavior or verbal expressions that involve an expressed or implied threat to interfere with an individual's personal safety, academic efforts, employment, or participation in college sponsored activities.
 - g. Inflammatory speech intended as a personal insult to someone and/or abusive language, inherently likely to provoke a violent reaction in the one the comments were directed toward or others who could hear it.
- 8. Personal information shared by classmates or faculty during instructional session to enhance the learning experience should be treated as confidential information and not discussed outside of the class.
- 9. Cell phone and electronic device use during lecture and lab is at the discretion of the instructor.
- 10. Students are expected to be on time and attend all classes, labs, and clinical experiences. Habitual tardiness demonstrates a lack of commitment to the educational process and may be grounds for disciplinary procedures.
- 11. All students, staff, and faculty will use their assigned Mercer County Community College e-mail account for all electronic communication. Email notifications may also be sent directly from Black Board to a student email account. Students are expected to check their email on a daily basis. Time sensitive information may be sent via email.
- 12. Recording of theory class or other learning activities are at the discretion of the instructor. Students may only use recordings for personal study and may not post recordings to the internet in any form.
- 13. Students are expected to adhere to the academic integrity policy. All work is expected to be original or properly attributed.
- 14. Cheating or disclosing the contents of an examination or practical exam before, during or after administration is a violation of academic integrity and will be reported to the academic integrity committee.
- 15. Students are expected to adhere to the exam procedures, set out by their respective program and/or instructor.
- 16. Students are expected to be respectful of all school facilities and property. It is the responsibility of everyone to ensure that facilities are well maintained, and that property is not abused or stolen.
- 17. No equipment or supplies may be removed from the college, clinical or affiliation settings by students without the explicit permission of faculty. Diverting of supplies, equipment, for personal or unauthorized use is prohibited.

**MERCER COUNTY COMMUNITY COLLEGE
SCIENCE, HEALTH PROFESSIONS AND NURSING DIVISION
RADIOGRAPHY PROGRAM**

Clinical, Off-Site, and/or Field Experiences Associated with Health Professions Programs

18. Student prohibited behaviors towards any patient or client include but are not limited to:
 - a. Abusing, neglecting, or abandoning a patient in need of care.
 - b. Discriminating based on diagnosis, race, religious creed, color, national origin, age, disability, gender and/or sexual identity in the rendering of healthcare services within one's scope of practice.
 - c. Engaging in activity that could constitute fraud or forgery, such as falsification of documentation or students misrepresenting themselves to clients or staff.
 - d. Acting in a manner that could or do compromise patient/client safety; including those that are malicious, careless, or risky.
 - e. Engaging in romantic, sexual, or other non-professional relationships with patients/ clients under any circumstances.
 - f. The giving and receiving of gifts between students and patients/clients is prohibited. Gifts of food may be accepted, provided it is shared among the entire student and/or clinical team.
19. Students are strongly encouraged to consider how their internet presence on social networks, professional networks, public comment sections on web pages, etc. can reflect on their professional careers.
20. Patient privacy rights are protected by federal law.
 - g. Materials containing patient identifiers must not be removed from any clinical setting.
 - h. Any computer-generated materials or protected health information must be placed in a secure disposal or shredder box prior to the student leaving the clinical unit.
 - i. Information about patients and/or their circumstances should not appear on public forums, such as social media sites.
21. Students may not engage in non-approved use of cell phone or other electronic devices in clinical area.
22. Students may not take still pictures, videos, or audio recordings of patients or clients. Any pictures taken of students, faculty, and/or clinical staff may not include information identifying the clinical facility, staff, and/or patients, e.g., name badges, facility signs, logos, etc.
23. While the college respects the free speech rights of students, patient/client privacy must be the highest priority. Even de-identified information posted in a social media forum may be recognized by patients/clients, their families, or college clinical partners.
24. Students are not allowed to attend or visit a clinical site for school related purposes outside of scheduled clinical days.
25. Students may use only their own access codes, passwords, login codes, keys, and facility access cards. These are to be considered confidential, not shared with anyone and used only for the intended purpose related to clinical learning.
26. Any pictures taken of students, faculty, may not include information identifying the facility, staff, e.g., name badges, facility signs, logos, etc.
27. It is expected that all students will maintain a neat and professional appearance during all clinical experiences, consistent with their program uniform or dress code. Meticulous personal hygiene is essential.
28. Students may not act as a witness for any consent form.
29. Students may not transact any business for patients.
30. Personal or unauthorized use or diverting of supplies, equipment, or drugs is strictly prohibited.
31. Any student who realizes that s/he has made a clinical error is obligated to report the situation to their instructor immediately.

32. Students may not perform acts beyond the scope of practice of a student. This includes practicing or demonstrating skills not yet taught by the instructor in the clinical, lab, or classroom setting.
33. Students may not assume duties and responsibilities within the practice that the student has not been prepared or trained for.
34. Students may not access clinical documentation systems of clinical facilities outside the scope of their student responsibilities.
35. Students may not make visits of a personal nature while in Mercer County Community College clinical or affiliation attire.
36. Use of chewing gum and tobacco is prohibited at all clinical sites. This includes chewable tobacco products, snuff, and smoking by inhaling, exhaling, burning or carrying any lighted cigarettes, cigar, pipe or other such device which contains tobacco or other smoke or vapor producing products such as e-cigarettes.