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CONFIDENTIALITY STATEMENT

I understand that in the performance of my duties as a Fulton-Montgomery Community College student radiologic technologist, I have access to and involvement in the processing of protected health information. I understand that I am obligated to maintain the confidentiality of this information at all times. Protected health information includes all identifiable patient/resident information such as: name, address, relative, employers, birth date, telephone numbers, e-mail addresses, social security numbers, and any personal information provided to them orally, contained in patient medical records, or maintained on the facility's electronic information system.

I understand that a violation of these confidentiality considerations could result in immediate termination from the radiology program. I further understand that I may be subject to legal action should I violate the rules of maintenance of confidentiality.

Please read policy #26-Confidentiality & HIPAA

Date: _____

Printed Name: _____

Signature: _____

Note: Some area hospitals require students to sign their own confidentiality statement.

(For an example of HIPAA see AMC Policy Attached)

HIPAA Law (in brief)

- **The patient must receive a clear written explanation of how the health provider may use the disclosed information.**
- **The patient will be able to see and copy records and request amendments.**
- **A history of routine disclosures must be available to the patient.**
- **Health care providers must obtain consent before sharing routine information on treatment, payment, and health care operations. Separate authorization is needed for non- routine disclosures and non-health purposes.**
- **Patients have the right to request restrictions on uses and disclosures of their information.**
- **Patients may file complaints with a covered provider or with HHS about violations of these rules.**

FULTON-MONTGOMERY COMMUNITY COLLEGE

Radiologic Technology Program

LICENSURE VERIFICATION

Please Print

Class of _____ Date _____ Last 4 of Social Security Number: _____

Name _____
Last First Middle

Permanent or Legal Address

Street City County

State Zip Telephone Number (____)

Temporary Address (Address while attending FMCC, if different from above)

Street City County

State Zip Telephone Number (____)

Birth Date: ____/____/____

E-mail _____

In order to assure your eligibility for licensure at the completion of the program in Radiologic Technology at Fulton-Montgomery Community College, it is necessary that the department have the following information in order to assist you in applying for verification that you will be able to obtain a license/certification to practice. This question appears on the Application for State of New York Licensure.

1. Except for adjudications as youthful offender, wayward minor or juvenile delinquent, have you ever been convicted of an Offense (misdemeanor or felony) against the law, forfeited collateral or are you now under charges for any offense against the law?_Yes___No

If yes, please meet with program director or email the NYS Department of Health at:

berp@health.state.ny.us

to discuss necessary process for licensure and ARRT Radiography Registry Exam application.

Notes: A conviction is not an automatic bar to licensure. Each case is considered on its individual merits.

*** If yes, it is imperative that you make an appointment to see the Program Director or contact NYS/ DOH. Also, refer to Policy #2, located in the policy section of the Program Notebook.**

Name _____
Print Name

Name _____
Signature

Date _____

Remarks:

PERMISSION TO RELEASE INFORMATION FORM

I hereby provide permission to SUNY Fulton-Montgomery Community College to release my name, social security number, and date of birth to the clinical experience sites or to the State Education Department if required.

I have been informed that this information may be utilized by an agency to perform a New York State Abuse Registry screening in compliance with NYS Public Health Law 2803-d.

In addition, I have been informed that this information is required to complete the 2 PG Form for Application for Licensure to the New York State Education Department.

Additionally, I hereby give permission for the release of health information contained in my health records maintained at SUNY Fulton-Montgomery Community College to responsible clinical agencies.

Signature: _____

Last 4 Digits of Social Security Number: _____

Date of Birth: _____

Current Date: _____

PROGRAM NOTEBOOK ATTESTATION

I have received the Fulton-Montgomery Community College Radiologic Technology Program Notebook and am aware that the document is available for viewing anytime on the FM Radiologic Technology webpage.

I understand the contents. There are three main parts, overview, policies, and appendices. I agree to abide by the procedures and policies in this booklet as they have been explained to me. I understand violations will result in a sanction ranging from an informal warning to program dismissal.

Place initials **in front** of the checkbox and **then check** the box for the following to indicate that you understand the below FM Radiologic Technology policies:

- ☐ Health Requirements for students
- ☐ Attendance Requirements
- ☐ Release of Information
- ☐ UPA Form
- ☐ Laboratory Policy
- ☐ Supervision Policy
- ☐ Field Trip Guidelines
- ☐ Safe Exposure Practice/Limits
- ☐ Fitness For Duty
- ☐ Electronic Device Policy
- ☐ ARRT Standards of Ethics
- ☐ Program Fees, additional fees, book requirements, Trajecsys
- ☐ Patient Care Competencies, Orientations
- ☐ MRI Safety
- ☐ Workplace Safety Policy including OSHA and education about Blood Borne Pathogens
- ☐ Fitness for Duty Policy
- ☐ Sexual Harassment & Title IX
- ☐ Standard Precautions & Infection Control
- ☐ Reporting Communicable Diseases
- ☐ COVID Precautions & Guidelines
- ☐ Rad Tech Program Notebook: Program Overview, Policies and Appendices

Print Name: _____

Signature: _____

Date: _____

FULTON-MONTGOMERY COMMUNITY COLLEGE RAD TECH HEALTH FORM

After acceptance into the Radiologic Technology program, and prior to enrollment in the first Rad Tech course, the student will complete the FMCC Rad Tech Health Form. This form includes immunizations, health physical and American Heart Association Basic Life Support (BLS) credentials. The thoroughly, completed form must be uploaded and approved by CastleBranch by September 15th. Enrolled students who are not in compliance with immunization, health physical requirements or BLS credentials will be notified by email. Student will have 14 days from the time of notification to insure proper compliance. After such time, a non-compliant student's acceptance in the program will be void, and the space will be filled. Students are responsible for maintaining up-to-date health records and BLS credentials throughout the program. If any item lapses, the student will not be allowed to attend any Rad Tech classes (on and off-campus) until this requirement is met. The student may also be academically withdrawn from the Rad Tech program. **Documentation must be uploaded to CastleBranch for review and final approval.** Portal link: portal.castlebranch.com/yf04

Student Name: _____ Date of Birth: _____
Last *First* *M* *M/D/Y*

1. MANTOUX SKIN TEST Freshman 1st Step PPD Date: _____ Results: _____
 Freshman 2nd Step PPD Date: _____ Results: _____
 Senior 1-Step PPD Date: _____ Results: _____
-OR-
 Quantiferon-TB Date: _____ Results: _____
-OR-
 Chest Xray (If Mantoux is positive or contraindicated) Date: _____ Results: _____

2. MMR (Two doses given after 1967 if student was born after 1/57)
 First Date: _____ Second Date: _____

-OR-

3. RUBEOLA (Titer necessary if student has not had two doses of MMR)
 Vaccine Date: _____ OR Titer Date: _____ Results: _____

4. RUBELLA (Titer necessary if student has not had one dose of MMR after 15 months of age)
 Vaccine Date: _____ OR Titer Date: _____ Results: _____

5. MUMPS (Titer necessary if student has not had one dose of MMR after 15 months of age)
 Vaccine Date: _____ OR Titer Date: _____ Results: _____

6. DIPHTHERIA/TETANUS BOOSTER (Update every ten years) Date: _____

7. VARICELLA Vaccine Date 1: _____ Vaccine Date 2: _____
-OR-
 Titer (IgG) Date: _____ Results: _____

8. HEPATITIS B Immunization Series
 Date # 1: _____ Date # 2: _____ Date # 3: _____
-OR-
 Hepatitis Titer Date: _____ Results: _____
-OR-
 Hepatitis Booster Date: _____ Results: _____
-OR-
 Hepatitis Waiver Signature: _____ Date: _____

9. INFLUENZA VACCINE (Update Annually) Date: _____
Due in October

8
-OVER-

10. **SABIN POLIO VACCINE** (3 doses if the student is 18 years or under)

Date # 1: _____ Date # 2: _____ Date # 3: _____

11. **COVID-19 VACCINE (Recommended)** ☐ Moderna ☐ Pfizer ☐ Johnson & Johnson

Date DOSE #1: _____ Date DOSE #2: (If applicable) _____ Date BOOSTER: _____

PHYSICIAN / NURSE PRACTITIONER / PHYSICIAN'S ASSISTANT:

In keeping with the requirements of the N.Y.S. Health Department, I have performed a medical evaluation and found no evidence of physical limitations or mental impairment which could interfere with clinical performance or impose potential risks to patients or personnel. In addition, to the best of my knowledge, the student is:

- Free from addiction to drugs, alcohol, or other behavior altering substances
- Able to stand, walk, bend, push, grasp, and lift **without restriction**
- Has normal sight, hearing and speech (with correction)

Physician/NP/PA Please Print

Physician/NP/PA Signature

Date

Agency Stamp/Seal

STUDENT:

Because clinical agencies require health information regarding the students participating in clinical experiences, the student must sign a waiver allowing the college to release this information. Signing the statement below will allow this.

I hereby give permission for the release of health information contained in my health records maintained at Fulton-Montgomery Community College to responsible clinical agencies.

Name (Please Print Clearly): _____ Date of Birth: _____

First Last MI MM/DD/YYYY

Signature: _____ Date: _____

**American Heart Association
Basic Life Support (BLS)**

Initial date of completion

Renewal Date of completion

NOTE: All physical and immunization information must be transcribed onto this official FMCC Health Form and signed by a Physician/NP/PA before submission. This completed Health Form needs to be uploaded & approved by CastleBranch no later than September 15th.

Documentation must be uploaded to CastleBranch.

Portal link: [//portal.castlebranch.com/yf04](https://portal.castlebranch.com/yf04)

VARICELLA POLICY WAIVER

“Varicella vaccine is recommended for children on or after their first birthday for susceptible children, ie, those who lack a reliable history of chickenpox (as judged by a health care provider) and who have not been immunized. Susceptible persons 13 years or older should receive 2 doses, given at least 4 weeks apart.”
New York State Immunization Update, Winter 2001

Although there are no New York State requirements for healthcare workers to demonstrate immunity to the varicella-zoster virus (chickenpox), health care organizations and healthcare educational facilities are strongly encouraged to ensure that their workers/students demonstrate immunity to the virus. This is extremely important to recognize in light of the fact that students perform in healthcare settings where increased risk for exposure to infection exists.

FMCC’s Radiology Program is in compliance with the recommendations of the New York State Department of Health. Although proof of immunity, in the form of a titer from a healthcare provider or evidence of vaccination, is recommended for all students who participate in clinical affiliations, students who have a history of compromised immunity or who are pregnant should not receive the chickenpox vaccine due to the possibility of serious side effects. Please consult the following agencies for further information regarding risks: The Fulton or Montgomery County Health Departments or the New York State Department of Health. Those who are unsure of immunity may obtain a blood titer level to determine immunity to the virus.

I have read the information provided above regarding varicella (chicken pox) vaccination and understand the consequences of lack of vaccination. Furthermore, I have been informed that some agencies require documentation of proof of immunity against this virus. If proof of immunity cannot be provided and there are no alternative options for the clinical experience, I acknowledge that I will be unable to complete the clinical requirements of the Radiology Program.

Signature

Date

Due to personal or health related reasons, I choose not to receive the vaccination at this time and do not hold the College responsible for risks I may be exposed to as part of the clinical experience in the Radiology Program.

Signature

Date

**FULTON-MONTGOMERY COMMUNITY COLLEGE
RADIOLOGIC TECHNOLOGY FULL TIME PROGRAM
FACULTY LIST**

Karlyn LaBate MS R.T.(R)(M)(CV)(CT)(ARRT)

- SUNY FMCC Program Director
- Associate Professor; Radiologic Technology
- 30 years of experience in Radiology
- ARRT Radiography, Mammography, Computed Tomography, and Cardiovascular Interventional Certification
- MS Health Administration University of St. Francis
- BS University of St. Francis
- AAS Fulton-Montgomery Community College
- Albany Memorial School of X-Ray Technology
- Attended Bloomsburg University in Pennsylvania for RRA coursework

Member of:

ARRT, ASRT, AERTSNY, NYSSRS

Licensed by NYS DOH (licensure includes certification to inject)



Kullen Bailey MS R.T.(R)(CT)(ARRT)

- SUNY FMCC Clinical Coordinator
- Assistant Professor; Radiologic Technology
- 11 years of experience in Radiology
- ARRT Radiography and Computed Tomography Certification
- MS in CDIT SUNY University at Albany
- BS SUNY Empire State College
- AAS Radiologic Technology SUNY Fulton-Montgomery Community College

Member of:

ARRT, ASRT, AERTSNY, NYSSRS

Licensed by NYS DOH (licensure includes certification to inject)



Unacceptable Practice Act Form

Unsafe or unacceptable practice act forms are used to inform students of unsafe or unacceptable actions in the classroom or clinical setting. This form is to be used as a tool to inform the student of direct corrections or modifications required for the student to be successful in the profession. Unsafe or unacceptable practice actions may include but are not limited to:

- Excessive tardiness/absenteeism
- Unsafe transportation of a patient
- Violation of the ASRT Code of Ethics
- Exposing wrong patient, wrong part
- Violation of any of the program notebook policies
- Not checking pregnancy status prior to exposure
- Failing to identify patients correctly
- Lack of Civility
- Failure to follow proper supervision rules
- Lack of initiative or participation, indifferent attitude
- Repeated poor performance in the clinical setting
- Lack of professionalism
- Failure to follow department protocols

Each UPA form represents a 3% reduction in the students overall clinical or classroom grade in the appropriate course. After 2 UPA forms submitted, students will be issued an individual clinical probation contract for performance improvement planning. Failure to meet the contract may result in program dismissal.

UPA forms will be kept in the students file and be cumulative throughout the five semesters of the program.

After the third UPA form is submitted, program faculty will meet with the Academic dean to discuss circumstances and potentially dismiss the students from the program.

(additional documentation should be attached)

Student Name: _____

Date: _____ **Student Signature:** _____

Evaluator: _____

Reason for UPA: _____

Clinical Coordinator Signature: _____

Program Director Signature: _____

Student Feedback/ Notes/ Counsel:

FMCC RADIOLOGIC TECHNOLOGY FIELD TRIPS

The mission of the Radiologic Technology program is to provide an excellent educational experience. The radiographic technologist will be committed to their profession by continuing education.

Often field trip opportunities will surface and be presented to the appropriate class. These are excellent occasions for students to network and grow in the profession. Field trips that are considered academic in nature are strongly recommended and may have a graded assignment included. Students may opt out of participating in field trips but will be given an alternate individualized assignment (may include newspaper article, etc.) in addition to attending their scheduled clinical assignment while the class is on the field trip.

Clinical Orientations, Patient Care Competencies, Clinical Site Requirements,

The Radiologic Technology Program Curriculum meets the guidelines as recommended by the ASRT; required by the ARRT, NYS DOH, and the JRCERT. In addition, each student will uphold the policies and procedures set forth by their respective clinical sites.

Students will attend a clinical orientation prior to their freshmen and senior clinical rotations.

In addition, students will complete a clinical site mandated orientation which may be self-study or a required on-site orientation. Clinical sites require this prior to the student attending the clinical course.

To become a candidate for the ARRT Radiography Registry Exam, students must also demonstrate competence in the prescribed patient care activities.

Freshmen students will complete these activities other than CPR, with nursing faculty in June prior to the start of their clinical rotation.

4.2.1 General Patient Care Procedures

Candidates must be CPR/BLS certified and have demonstrated competence in the remaining nine patient care procedures listed below. The procedures should be performed on patients whenever possible, but simulation is acceptable if state regulations or institutional practice prohibits candidates from performing the procedures on patients.

General Patient Care Procedures	Date Completed	Competence Verified By
CPR/BLS Certified		
Vital Signs – Blood Pressure		
Vital Signs – Temperature		
Vital Signs – Pulse		
Vital Signs – Respiration		
Vital Signs – Pulse Oximetry		
Sterile and Medical Aseptic Technique		
Venipuncture*		
Assisted Patient Transfer (e.g., Slider Board, Mechanical Lift, Gait Belt)		
Care of Patient Medical Equipment (e.g., Oxygen Tank, IV Tubing)		

*Venipuncture can be simulated by demonstrating aseptic technique on another person, but then inserting the needle into an artificial forearm or suitable device.

Structure of Clinical Experience Education for Radiologic Technology

Clinical education for Radiologic Technology students at Fulton-Montgomery Community College is divided into five significant and required units.

1. RAD 120 Clinical Experience I (first semester freshman)
 2. RAD121 Clinical Experience II (second semester freshman)
 3. RAD 122 Clinical Experience III (summer session freshman)
 4. RAD 220 Clinical Experience IV (first semester senior)
 5. RAD 221 Clinical Experience V (second semester senior)
- Final Competency-Exit Day (See Policy #20)

Student Clinical Experience Schedule

Clinical Experience is assigned to a minimum of two of our clinical affiliates, and one orthopedic practice, an outpatient radiation therapy practice, a pediatric, and a trauma rotation at a trauma center. The freshman students will start their clinical experience in a lab/classroom setting for an orientation period of approximately four weeks. Students will attain skills in the function of the radiographic equipment, ascertain image receptor sizes, practice safe exposure techniques, be introduced to radiation safety and universal health care policies. The lab is located on campus C005. The freshman will be assigned to their hospital Tuesday and Thursday of each week. In Clinical Experience II, the freshman will have one week of clinical experience prior to the start of the spring semester. The summer session, Clinical Experience III (RAD 122), provides the student with approximately nine weeks of full-time, 40-hour workweek departmental experience as well as a one week pediatric rotation. This is a most effective time for students to work on accuracy and timeliness and competency requirements. Students will begin rotating through “specialty” modalities (Angio, CT, Nuclear Medicine, MRI, Radiation Therapy, and Ultrasound) during RAD 122 to gain knowledge of alternative imaging modalities. There will be scheduled class meetings on campus during the summer clinical time. After the completion of RAD 122, the students are now referred to as senior students.

In Clinical Experience IV (RAD 220), the seniors will have one week of clinical experience prior to the start of the fall semester for clinical orientation and departmental experience at a new clinical site. After the orientation, senior students will be assigned to their hospital Monday, Wednesday, and Friday each week. In the fall of the senior year, students will continue to rotate through the “specialty” modalities for those that were not completed in RAD 122. In addition, they will be scheduled for a weekend trauma rotation. In Clinical Experience V (RAD 221), the students will have the majority of their mandatory and elective competency exams completed. In RAD 221, students will be scheduled for their Final Competency or Exit Day.

CLINICAL EXPERIENCE SYLLABI



RAD 120 Clinical Experience I (first semester freshman): 4 credit hours
RAD 121 Clinical Experience II (second semester freshman): 4 credit hours
RAD 122 Clinical Experience III (summer session freshman): 7 credit hours
RAD 220 Clinical Experience IV (first semester senior): 6 credit hours
RAD 221 Clinical Experience V (second semester senior): 6 credit hours

Karlyn LaBate, MS, RT(R)(M)(CT)(CV)

Program Director

Office: C005A karlyn.labate@fmcc.suny.edu 736-3622 Ext. 8901

Kullen Bailey, MS, RT(R)(CT)

Clinical Coordinator

Office: C005B kullen.bailey@fmcc.suny.edu

736-3622 Ext. 8902

See course specific syllabi for office hours and Clinical course specific policies.

Required Texts:

Radiologic Technology Program Notebook

References for all Clinical Experience Courses:

- Bontrager, Kenneth L. & John P. Lampignano Textbook of Radiographic Positioning and Related Anatomy, 11th edition.
- Reference: Ballinger, Frank, Merrill's Atlas of Radiographic Positions & Radiologic Procedures, 14th ed. Vol. I, II, III. ISBN: 978-0-323-56766-4
- Long, Rollins, Smith, Merrill's Pocket Guide to Radiography, 14th ed.

Program Objectives:

At the completion of the Radiologic Technology Program, students will:

- Attain clinical competency in the performance of basic radiologic procedures.
- Demonstrate problem solving and critical thinking skills.
- Cultivate and promote good communication skills with patients, staff and others.
- Establish a role as a medical imaging professional. Develop moral, ethical and legal principles of professionalism.

Clinical Participation: The student actively observes and participates with the radiographer during radiographic procedures. As students gain experience in various procedures, he/she masters the stages of competency resulting in their professional independence. All mandatory and elective competencies must be completed at the end of this semester. Students must have direct supervision, until competencies tests are passed. See Policy # 13. The passing of these competencies will allow the student to perform the specific diagnostic procedure requiring indirect supervision. **Repeat radiographs are always performed under the direct supervision of clinical faculty or a licensed radiographer.**

Course Policies:

GRADING/EVALUATION

Grade worksheets and evaluations will be utilized to determine clinical experience grades. The faculty will review these forms with the students and have the students sign each form as an indication that both parties reviewed the worksheets/evaluations.

The clinical grade is either satisfactory 'S', Incomplete 'I' or Unsatisfactory 'U'. Unsatisfactory grades require expulsion from the program.

A numeric grade is also calculated. **Students must achieve a minimum of 'C' (74.5- 76.4) to receive a Satisfactory clinical grade in RAD 120. The clinical grade has 5 components:**

- Satisfactory completion of assigned clinical snapshots
- Satisfactory completion of required competencies
- Satisfactory attendance
- Critical thinking competency (when required)
- Satisfactory Professional Growth assessment (from clinical instructor)

RAD 221 in addition:

- Successful completion of the final competency (at the end of the program)

A student who is expelled from the clinical site for any reason shall be removed from the program

Clinical Experience Grade A grade of "S" Satisfactory for all Clinical Experience Courses is required in order to graduate and remain in the program.

RAD120, 121, 122, 220, 221

All Mandatory and Elective Competency Assessments

Must receive a score of 85%, otherwise, Failed Competency-Corrective Measures paperwork must be initiated (located in the clinical experience booklet)

Automatic Fail Criteria for Competency Assessment as follows:

1. Wrong patient OR failure to properly identify patient according to site protocol.
2. Wrong part
3. Wrong side
4. No lead marker visible on 2 or more images. (If able to open collimation mask or window/level to detect marker, the marker is acceptable)
5. Failure to question patient regarding pregnancy status prior to exposure (per clinical site protocol).

Final Competencies must receive a grade of 85% to be considered passing, with a repeat rate of less than 15%.

Semester clinical grades will continue as S/U under the following progressive scale:

RAD 120	74.5 = S
RAD 121	77.0 = S
RAD 122	79.5 = S
RAD 220	82.0 = S
RAD 221	85.0 = S

Midterm/Final Worksheets (contained in clinical syllabi)

Students must complete 3 competency evaluations during RAD 120 and 15 competency tests per semester thereafter. This will ensure that students will complete the mandatory 37 and 15 elective competency tests required for graduation. Grading for fewer performed competencies will be at the discretion of the clinical supervisor. This is subject to change based on the current clinical environment at the discretion of the clinical coordinator.

A grade of Unsatisfactory in any clinical course will mean dismissal from the program

Clinical Documents

Clinical Snap Shot Evaluations:

Clinical performance will be evaluated by the clinical faculty or licensed radiographer. Evaluations are used at the end of an assigned rotation to ascertain the student's level of performance. It represents skills that are satisfactory, consistent in his/her performance; progressing, developing skills, and unsatisfactory, performance unacceptable evaluations are to be completed by a licensed radiographer or clinical faculty. It is the student's responsibility to facilitate timely submission of biweekly area evaluations. Students will be given a schedule for due dates.

Clinical Competencies:

Clinical competency is achieved through the student observing, participating and mastering their skills prior to competency testing. The students must pass a series of, at least three, proficiency evaluations prior to competency testing. Student may take as many proficiency evaluations as they feel necessary before taking their competency test; a minimum of 3 performed is required. Clinical faculty or clinical staff radiographers with over a year of experience, may evaluate competency testing. **All competencies listed on the Master Checklist with a grade of 85 or better, must be successfully completed in RAD 221.** If the student has not successfully completed all the required competencies, clinical requirements, a grade of “I” or “U” will be recorded on the transcript at the discretion of the faculty. Students receiving an ‘I’ or “U” as a clinical grade will not graduate from the program in May. The student may be offered a remediation program for clinical competency at the discretion of the program director. Students participating in final clinical remediation must successfully complete all required competencies/clinical requirements in order for a change of grade to an ‘S’ for RAD 221 to be submitted.

Failure on a competency test will require that a student begin the proficiency evaluation cycle again with faculty supervision. A failing grade will be averaged with all the other competency tests completed for the semester in which that failed competency evaluation was completed.

Final Competency (Exit Day):

This is a program requirement. The final competency can only be scheduled when all Mandatory and Elective competencies required by the ARRT are completed. This competency will determine if the student is qualified to sit for the boards. The students must pass this competency test before they can make arrangements with the ARRT for their examination date. For specific details, see **Policy # 20**

Critical Thinking Competency:

Students are required to complete a minimum of one Critical Thinking Evaluation per clinical semester. This form will be completed by FMCC faculty and is used to evaluate a student’s ability to think outside the box when these circumstances arise.

Assessment of Professional Growth:

Each assigned faculty shall evaluate the student progress at mid-term and at the end of the semester (Waived for freshmen first semester).

Dress Code Compliance:

Compliance with the dress code is expected. Failure to comply will result in loss of grade point and/or student being sent home from clinical site (loss of bank day).

Attendance: See Policy # 1 for full clinical attendance policy.

COMPETENCIES - At the end of the clinical course of study, the Program Director will attest to the successful completion of 37 mandatory and 15 elective competency procedures with the American Registry of Radiologic Technologists providing admission to the ARRT Registry Examination.

Clinical Days and Hours

Clinical experience is generally held on Tuesday/Thursday- (freshmen) and Monday/Wednesday/Friday (seniors). Full time weeks are Monday-Friday. **Total didactic and clinical hours may not exceed 40 hours per week.** It is a violation of the attendance policy and could result in an unsatisfactory clinical grade, to attend clinical outside normally scheduled hours without the required prior approval. For further information, reference “Clinical Scheduling” in the Appendices section.

Freshmen students will participate in a pediatric rotation at Albany Medical Center Hospital during the summer clinical session. This will be a rotation where students are excused from their regular clinical site.

Freshmen students will participate in an orthopedic office rotation at Mohawk Valley Orthopedics. This will be a two-day rotation. Students are excused from their regular clinical site for this rotation.

Senior students will participate in a trauma rotation at Albany Medical Center Hospital 6 months prior to graduation typically starting in November. This will be for two 8-hours shifts and will be accomplished on weekends including evening and night shifts. Students are excused from their regular clinical site on the Friday before and the Monday after their trauma rotations. In addition, students will participate in a one-day angiography rotation at Albany Medical Center.

Senior students will participate in an observation only radiation therapy rotation at NY Oncology and Hematology, Amsterdam, NY. This will be a 4-hour rotation. Students are excused from their regular clinical site for this rotation.

Students may be asked to change their hours for particular experiences. For example, if a student is scheduled for a rotation in mobile radiography, they may be asked to work from 6:00 AM until 2:00 PM. Changes in clinical hours must be approved in advance by the clinical coordinator.

Students must be available for 8 hour clinical rotations between the hours of 6 am – 7 pm on their scheduled clinical days. Every effort will be made to maintain a schedule.

However when necessary, with notice provided to the student, clinical hours may be modified. For example, 11:00am – 7:00pm and weekend rotations may be mandated based on if it has been determined by the Program Director and Clinical Coordinator that these rotations are necessary for student improvement of clinical performance, or clinical site work flow fluctuations.

Senior students, who are in their last semester, may request an occasional change of shift or weekend day. These changes must be approved by the clinical coordinator and clinical instructor in advance. **Total didactic and clinical hours may not exceed 40 hours per week or 8 hours per day. Weekend rotations shall not exceed a total of 80 hours.**

Clinical Experience Course Descriptions and Course Learning Outcomes:

For Clinical Experience Course Descriptions and Course Learning Outcomes, reference RAD 120, RAD 121, RAD 122, RAD 220 and RAD 221 course syllabi.

**Fulton-Montgomery Community College
Radiologic Technology Program
Clinical Experience**

Patient Services

Name _____ Semester _____

Class of _____ Date _____ Clinical Site _____

This form is to be completed by the student and turned into Mr. Bailey for filing. Be sure to make a copy prior to turning in so that the form may be referenced throughout the duration of the clinical experience.

List the Radiology Department Phone number: _____

PATIENT WAITING AREA

List the location of all outpatient-waiting areas.

List the location of all in-patient waiting areas.

List the facilities/bathrooms found in an outpatient waiting area.

DRESSING ROOMS

List the location of all emergency call systems if applicable.

LINEN

List the location(s) of all linen supplies.

Explain the system for disposing of contaminated linen or wastes.

STRETCHERS/WHEELCHAIRS

Explain where or how you would obtain a stretcher or wheelchair

Public/Patient Safety

OXYGEN

List the location of all oxygen tanks and wall mounted O2 within the department.

FIRE ALARM BOXES

List the location of all fire alarm boxes within the department

Explain how to activate the alarm.

FIRE HOSES/ EXTINGUISHERS

List the location of all extinguishers in the department.

Explain how to activate fire extinguishers.

FIRE DOORS

List the location of all fire doors.

Explain how they work.

EXITS

List all exits from the department.

Explain why the elevators would never be used in a fire.

FIRE DRILL PROCEDURES

List the steps taken in case of a fire.

PATIENT EMERGENCY

List location of emergency buttons (where available)

List the action (s) you would take if your patient fainted.

Where is the ammonia capsule kept?

List the actions you would take if your patient stopped breathing or arrested.

HOSPITAL CODES

List all codes used.

List the person(s) responsible for initiating a code. If you are responsible, what is the protocol to initiate a code?

What is the difference between a Code for respiratory/cardiac arrest versus a rapid response (RRT)?

DEPARTMENT NURSE OR HOSPITAL NURSING STAFF

How would you contact a Radiology Nurse/hospital nurse?

NEEDLES/SYRINGES

Describe the method of disposing of contaminated needles and syringes.

FULTON-MONTGOMERY COMMUNITY COLLEGE

Radiologic Technology Program

Clinical Experience

Diagnostic or Fluoroscopic Room Equipment Evaluation

Name: _____ Clinical Site: _____

Semester: _____ Class of: _____ Room: _____

Must be completed by student and should be reviewed by evaluating technologist.

EQUIPMENT: a. Make: _____ b. Model: _____

c. Table Weight Limit: _____

d. EI Range: _____

e. Kvp Range: _____

f. Ma Range: _____

g. Table Bucky Grid Ratio _____

h. Upright Bucky Grid Ratio: _____

i. Focal Spot Sizes: _____

j. Total Tube Filtration: _____

(Review room manual from manufacturer)

MANIPULATE EACH TUBE:	<u>YES</u>	<u>NO</u>	<u>NA</u>
Transversely			
Center/detent lock to the center of the table			
Longitudinal lock			
Vertical lock			
Tube angulations			
Tube swing lock (90 degrees)			
Center lock to the center of the upright bucky			
Detent to 40 inches for table top/72 inches for upright bucky			
MANIPULATE TABLE CONTROLS:			
Move the table top longitudinally/transversely			
Utilize the table center button if applicable			
Angle the table upright/Trendelenburg if applicable			
Attach/detach the footboard if applicable			
Attach, adjust the patient – handles if applicable			
Raise/lower table if applicable			
Activates lock for table top travel and for raising or lowering table, if applicable			
OPERATE THE CONTROL PANEL:			
Demonstrate tube/bucky combination			
Select AEC/manual technique			
Collimate using manual controls			
Collimate using PBL if applicable			
Operate hand exposure switch or foot pedal			
Program fluoroscopy settings			
****Review Monitor Functions, and Post-Processing Functions****			
DIGITAL FLUOROSCOPY:			
Type in patient demographics			
Select appropriate radiographic procedure			
QC if applicable			
process digital image			
Select images to print if applicable			
Print images if applicable			

Technologist Signature: _____

FULTON-MONTGOMERY COMMUNITY COLLEGE
Radiologic Technology Program
Clinical Experience
Portable Equipment Evaluation

Name: _____

Date: _____ Semester: _____

Class of: _____ Clinical Site: _____

This form is to be completed by the student and filed in the student's folder to be used for area evaluation point system.

Identify the Make & Model of Portable Unit: _____

PORTABLE CONTROLS:	<u>YES</u>	<u>NO</u>	<u>NA</u>
Connect electrical cord to outlet if needed			
On/Off switch			
Locks – adjust tube laterally, longitudinally and vertically			
Operate portable using appropriate/applicable controls			
Collimate appropriately			
Use appropriate SID			
Tube angulations when needed			
Effective manipulation of unit			
CONTROL PANEL SELECTIONS:			
kVp, mA, time or mAs			
Exposure/rotor handle or switch			
SIMULATE:			
Exposure/portable location for chest and abdomen			
Exposure/portable location for extremities (hand, hip)			
ACCESSORIES:			
Protective lead apron/shields			
Image Receptors w/wo Portable Grid			

Technologist Signature: _____

FULTON-MONTGOMERY COMMUNITY COLLEGE
Radiologic Technology Program
Clinical Experience
Equipment Evaluation
C-ARM UNIT

Name: _____

Semester: _____

Class of: _____ Date: _____ Hospital: _____

This form is to be completed by the student and filed in the student's folder to be used for area evaluation point system.

List Make & Model and Size (9" or 12"): _____

	<u>YES</u>	<u>NO</u>	<u>NA</u>
Locate the appropriate wall outlet			
Locate the On/Off button			
Locate auto/manual fluoro			
Locate digital controls			
Locate magnification selection			
Move monitor forward/backward/lock unit			
Move c-arm forward/backward/side to side			
Attach monitors to c-arm			
Connect to appropriate wall outlet (use of adaptors if needed)			
Move "C" in all directions and know which lock is to be used			
Identify control panel on c-arm			
Set up fluoroscopy auto/manual			
Know which button is for fluoro timer			
Enter patient demographics			
Identify controls for magnification			
Demonstrate digital options			
Demonstrate positioning of entire unit			
Demonstrate hard copy printing/ Transfer digital images to PACS			
Assist with OR staff proper handling of sterile C-arm cover			
Move C-arm into position			
Cover fluoro pedal with plastic bag			
Position fluoro pedal appropriately for surgeon			
Lead aprons available for all staff			
Test unit prior to surgery			
Disassemble C-arm (shut down before unplugging)			
Store in appropriate area			
Clean units			

vfc/2/04, 8/13 kl, 08/14 kl, 9/18 kcb

Technologist Signature: _____

FULTON-MONTGOMERY COMMUNITY COLLEGE
Radiologic Technology Program
Clinical Experience
SPECIALTY/MODALITY ROTATION
LEARNING OBJECTIVES

ORTHOPEDIC ROTATION:

Upon completion of a limited rotation in the Orthopedic Office, the student shall be able to:

1. Comfort and reassure the patient and family members.
2. Explain the basic procedure and answer simple questions.
3. Prepare the patient for the procedure.
4. Apply basic anatomy principles to images produced.
5. Assist the radiographer in patient education , preparations and procedures.
6. Assist with procedural variations, assist with patient immobilization.
7. Demonstrate effective communication skills.
8. Use critical thinking skills during patient procedures.
9. Maintain safe procedures and radiation protection toward self, patients and others.

TRAUMA ROTATION:

Upon completion of a rotation in Trauma Radiography, the student shall be able to:

1. Comfort and reassure the patient and family members.
2. Explain the basic procedure and answer simple questions.
3. Prepare the patient for the procedure.
4. Apply basic anatomy principles to images produced.
5. Assist the radiographer in patient education , preparations and procedures
6. Assist with procedural variations, assist with patient immobilization
7. Assist with procedural variations and “as-is” positions if applicable.
8. Demonstrate effective communication skills

9. Use critical thinking skills during emergent patient procedures.
10. Maintain safe procedures and radiation protection toward self, patients and others.

Students may not achieve competency assessments during this rotation.

PEDIATRIC ROTATION:

Upon completion of a limited rotation in the Orthopedic Office, the student shall be able to:

1. Comfort and reassure the patient and family members.
2. Explain the basic procedure and answer simple questions.
3. Prepare the patient for the procedure.
4. Demonstrate age specific competency.
5. Apply basic anatomy principles to images produced.
6. Assist the radiographer in patient education, preparations and procedures.
7. Assist with procedural variations, assist with patient immobilization.
8. Demonstrate effective communication skills.
9. Use critical thinking skills during pediatric patient procedures.
10. Maintain safe procedures and radiation protection toward self, patients and others.

Students may achieve competency at supervising technologists' discretion.

Angiography/Special Procedures Rotation:

At the completion of a limited rotation of sophomore students in Angiography/Special Procedures, the student shall be able to do the following:

1. Display a professional attitude and appearance.
2. Assist in comforting and reassuring the patient.
3. Assist in patient education through explaining the basic procedure and answer simple questions of the patient.
4. Assist in preparing the patient for the procedure.
5. Assist the radiographer with the equipment.

6. Follow sterile procedures and maintain sterile field where applicable.
7. Apply proper radiation protection procedures.
8. Identify the basic catheters, guide wires, etc.
9. Bring and discuss, at least, one angiography/special procedure case to Film Critique. Critique Discussion should include:
 - a. Definition of procedure
 - b. Equipment, injection method, contrast and dosage, projections, gowning and protective wear
 - c. Imaging requirements (positioning and exposure)
 - d. Anatomy visualized
 - e. Pathology visualized
 - f. Clinical information

Computed Tomography Rotation:

Upon completion of a limited rotation in the CT Department, the student shall be able to:

1. Comfort and reassure the patient.
2. Explain the basic procedure and answer simple questions.
3. Prepare the patient for the procedure.
4. Apply basic anatomy principles to cross sectional images.
5. Assist the radiographer in patient education, preparations and procedures.
6. Operate routine scan functions if applicable.
7. Demonstrate effective communication skills.
8. Indicate procedures requiring contrast agents.
9. Maintain safe procedures toward self, patients and others.

DEXA Scan Rotation:

Upon completion of a limited rotation utilizing the DEXA Scan unit, the student shall be able to:

1. Comfort and reassure the patient.
2. Explain the basic procedure and answer simple questions.
3. Prepare the patient for the procedure.
4. Apply basic anatomy principles to images produced.
5. Assist the radiographer in patient education, preparations and procedures.
6. Operate routine scan functions if applicable.
7. Demonstrate effective communication skills.
8. Maintain safe procedures toward self, patients and others.

Magnetic Resonance Imaging Rotation:

Students shall not complete this rotation until after appropriate safety training and screening, see policy # 28.

Upon completion of a limited rotation in the MRI Department, the student shall be able to:

1. Comfort and reassure the patient.
2. Explain the basic procedure and answer simple questions.
3. Prepare the patient for the procedure.
4. Apply basic anatomy principles to cross sectional images.
5. Assist the radiographer in patient education, preparations and procedures.
6. Operate routine scan functions if applicable.
7. Discuss specific safety precautions related to the MRI suite.
8. Demonstrate effective communication skills.
9. Indicate procedures requiring contrast agents.
10. Maintain safe procedures toward self, patients and others.

Nuclear Medicine Rotation:

Upon completion of a limited rotation in the Nuclear Medicine Department, the student shall be able to:

1. Comfort and reassure the patient.
2. Explain the basic procedures and answer simple questions.
Basic Procedure:
 - a. Bone, Cardiac, or Gall Bladder Scan
3. Prepare patient for the procedure.
 - a. Patient positioning
 - b. Basic patient preparations
4. Apply basic physiology principles to processed information.
5. Assist the Nuclear Medicine Technologist in routine responsibilities, such as, patient education, preparations and procedures. (To include Hot Lab, QC, Area Surveys)
6. Operate routine scan functions if applicable.
7. Demonstrate effective communication skills.
8. Demonstrate knowledge of Nuclear Medicine and radiation safety.
 - a. radioactive isotope decay
 - b. proper handling of radioactive materials
 - c. basic radiation physics
 - d. radiation biology principles
9. Maintain safe procedures toward self, patient and others.

Radiation Therapy at New York Oncology/Hematology is an OBSERVATIONAL experience only. Students do not assist in or perform any aspect of patient care.

Upon completion of a limited rotation utilizing the Radiation therapy unit, the student shall be able to:

1. Comfort and reassure the patient.
2. Explain the basic procedure to the therapist
3. Understands simulation process.
4. Demonstrate effective communication skills.
5. Maintain safe procedures toward self, patients and others.

Ultrasound Rotation:

Upon completion of a limited rotation in the Ultrasound Department, the student shall be able to:

1. Develop a basic understanding of the instrumentation and imaging procedures of sonography.
2. Recognize the differences in imaging principles between radiography and sonography.
3. Maintain a professional attitude and appearance.
4. Apply basic anatomy principles to images produces.
5. Assist the sonographer in patient education, preparations and procedures.
6. Demonstrate effective communication skills.
7. Maintain age procedures toward self, patients and others.

FULTON-MONTGOMERY COMMUNITY COLLEGE

Radiologic Technology Program Clinical Experience SPECIALTY/ MODALITY ROTATION Area Evaluation

Name: _____ Semester: _____

Class of: _____ Date: _____

SPECIALTY/MODALITY _____

Please check the appropriate response (Yes, No, NA if not applicable)

The student:	Yes	No	NA
is punctual.			
is professionally dressed.			
displays an acceptable attitude toward: Patients			
Staff			
communicates effectively with: Patients			
Staff			
displays initiative and willingness to learn.			
demonstrates understanding of simple instrumentation principles			
demonstrates desire to identify imaged structures and anatomy in this specialty/modality			
willingly assists technologist and others.			
demonstrates safe behaviors for self, patient and others.			
asks appropriate questions			
demonstrates understanding of radiation safety practices specific to this specialty/modality			
demonstrates initiative in learning the proper equipment use and procedures specific to this modality/specialty			
is able to explain/compare/contrast this specialty/modality to Radiography			

Evaluator/Technologist's Signature: _____

Student's Signature: _____

Comments:

Fulton-Montgomery Community College
Radiologic Technology Program
MRI Safety Screening Form

Student Name: _____

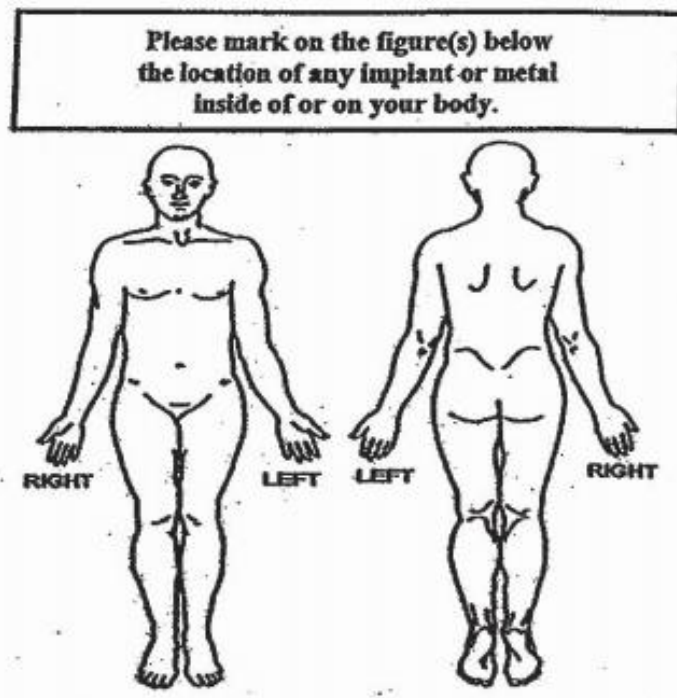
Date: _____



WARNING: Certain implants, devices, or objects may be hazardous to you and/or may interfere with the MRI procedure. **Do not enter** the MRI system room or environment if you have any question or concern regarding an implant, device, or object. Consult the MRI Technologist or Radiologist **BEFORE** entering the MRI system room. The MRI system magnet is ALWAYS on.

IMPORTANT INSTRUCTIONS: Before entering the MRI environment or MR system room, you must remove all metallic objects including hearing aids, dentures, partial plates, keys, beeper, cell phone, eyeglasses, hair pins, barrettes, jewelry, body piercings, watch, safety pins, paperclips, money clip, credit cards, bank cards, magnetic strip cards, coins, pens, pocket knife, nail clippers, tools, clothing with metal fasteners, and clothing with metallic threads. Please consult the MRI technologist or Radiologist if you have any question or concern **BEFORE** you enter the MRI system room.

1. Have you ever had an injury to the eye involving a metallic object or fragment (e.g., metallic shavings, foreign body, etc.)? Circle: Yes / No
2. Have you ever been injured by a metallic object or foreign body (e.g., BB, bullet, shrapnel, etc.)? If yes, please describe here: _____.



Please indicate if you have any of the following by circling "Yes" or "No" next to the statement to the right:

Yes / No	Aneurysm clip(s)
Yes / No	Cardiac pacemaker
Yes / No	Implanted cardioverter defibrillator (ICD)
Yes / No	Electronic implant or device
Yes / No	Magnetically-activated implant or device
Yes / No	Neurostimulation system
Yes / No	Spinal cord stimulator
Yes / No	Internal electrodes or wires
Yes / No	Bone growth/bone fusion stimulator
Yes / No	Cochlear, otologic, or other ear implant
Yes / No	Insulin or other infusion pump
Yes / No	Implanted drug infusion device
Yes / No	Any type of prosthetic (eye, penile, etc.)
Yes / No	Heart valve prosthesis
Yes / No	Eyelid spring or wire
Yes / No	Artificial or prosthetic limb
Yes / No	Metallic stent, filter, or coil
Yes / No	Shunt (Spinal or intraventricular)
Yes / No	Vascular access port and/or catheter
Yes / No	Radiation seeds or implants
Yes / No	Swan-Ganz or thermodilution catheter
Yes / No	Medication patch (Nicotine, Nitroglycerine)
Yes / No	Any metallic fragment or foreign body
Yes / No	Wire mesh implant
Yes / No	Tissue expander (e.g., breast)
Yes / No	Surgical staples, clips, or metallic sutures
Yes / No	Joint replacement (hip, knee, etc.)
Yes / No	Bone/joint pin, screw, nail, wire, plate, etc.
Yes / No	IUD, diaphragm or pessary
Yes / No	Dentures or partial plates
Yes / No	Tattoo or permanent makeup
Yes / No	Body piercing jewelry
Yes / No	Hearing aid
	(Remove before entering the MRI Room)
Yes / No	Other implant _____
Yes / No	Breathing problem or motion disorder
Yes / No	Claustrophobia

I attest that the above information is correct to the best of my knowledge. I read and understand the contents of this form and had the opportunity to ask questions regarding the information on this form prior to my MRI Modality Rotation.

Signature of Student completing this form: _____ Date: _____

Form Information Reviewed by: _____

Title of Reviewer: _____ Signature: _____

MRI Safety Quiz

Directions: Read the PowerPoint that was handed out to you and answer the following questions for confirmation and understanding of MRI Safety. A score of 80% or higher is required for completion.

1. True or False? (Circle One) Magnetic Resonance Imaging (MRI) is an invasive and sometimes painful test that helps physicians to diagnose medical conditions through the use of multi-planar imaging.
2. MRI imaging uses all of the following EXCEPT, _____, in order to produce three dimensional images of the human anatomy.
 - a.) Powerful magnetic field
 - b.) Computer
 - c.) Radio Waves
 - d.) X-Rays
3. True or False? (Circle One) The magnet used in the MRI scanner creates a force field which can affect objects that are close to it – The closer you are to the scanner, the stronger the attractive force.
4. True or False? (Circle One) The magnetic field cannot be seen, heard, or felt.
5. True or False? (Circle One) Any ferromagnetic material brought into the MRI scanner room (including but not limited to - oxygen tanks, stretchers, wheelchairs, scissors, keys) will become magnetized and can become a dangerous projectile.
6. True or False? (Circle One) The Missile Effect will not only damage equipment, but can fatally injure someone located in the scanner or between the object and the MRI scanner.
7. All of these are results of the Missile Effect EXCEPT:
 - a.) Possible injury to the patient or staff
 - b.) Delayed patient care due to the time it takes to repower the scanner
 - c.) The MRI scanner will never be affected by the Missile Effect
 - d.) Costly repairs to the MRI scanner
8. True or False? (Circle One) An MRI magnet is ALWAYS ON.
9. True or False? (Circle One) Only some patients must complete a Magnetic Resonance Imaging Screening and Information Form before they have an MRI scan.

10. True or False? (Circle One) You cannot enter the MRI Scan Room until you have permission from an MRI technologist.
11. The Joint Commission offers a 4 Zone area concept for recommendations for strategies to promote MRI Safety and to help reduce MRI accidents and injuries. Zone 4 refers to:
- a.) The general public
 - b.) Screened MRI patients and personnel that are under the supervision of Level 1 or level 2 personnel.
 - c.) Unscreened MRI patients
 - d.) Screened MRI patients under constant, direct supervision of Level 2 trained MRI personnel.

Radiologist/Student Experience: Students will observe a radiologist in an actual image-reading or other work experience. Students are expected to gain insight into the production of a quality radiographic image, its impact on diagnoses. Students will have the opportunity to observe pathologies relative to diagnostic imaging. *Students are required to complete 4 hours total.*

[illegible]

Radiologist/ RRA/RPA Signature: _____

Patient Care Competency Objectives:

Students will be able to:

1. Operate an automatic vital signs monitor
2. Interpret an automatic vital signs monitor
3. Measure oral temperature
4. Measure pulse by palpating the radial artery
5. Measure pulse oximetry
6. Measure respiration rate
7. Measure blood pressure via the automatic vital signs monitor
8. Measure blood pressure via the manual method
9. Operate a Pigg-O-Stat device
10. Communicate effectively with parents by explaining rationale of use of Pigg-O-Stat for Pediatric patients.
11. Prepare an Enema Bag for proper use for a Barium enema
12. Manipulate a C-Arm by telescoping, wagging, rotating, and tilting
13. Utilize proper C-Arm monitor functions
14. Draw up medication from a vial
15. Administer fluid through an NG tube

**Fulton-Montgomery Community College
Radiologic Technology Program
STUDENT EVALUATION
General Patient Care
Hand Hygiene Competency**

Name: _____ Date: _____

Hand Washing is the single most effective way to prevent the spread of infections within a health care facility.

Hands must be washed with soap and warm water:

- **When obviously soiled**
- **After it is known or suspected contact with blood or body fluids/substances**
- **Before eating, drinking, or handling food**
- **After using the toilet, blowing your nose, covering a sneeze or cough**

Hands may be cleaned with alcohol-based hand sanitizer solutions:

- **After contact with a patient's intact skin, performing x-ray examinations**
- **Lifting a patient to or from the x-ray table, and/or bed.**
- **Contact with environmental surfaces in the immediate vicinity of patients**
- **After glove removal**
- **For routine decontamination of hands for all clinical indications (except when hands are visibly soiled)**

Hand Hygiene Competency

The student:

Yes	No	Uses paper towel to handle controls for water unless there are foot or knee levers.
Yes	No	Wets hands thoroughly, keeping hands lower than elbows so water will drain from clean area to most contaminated area.
Yes	No	Applies antimicrobial soap.
Yes	No	Lathers well. Rubs hands and fingers together with firm rotary motion for 15-30 seconds. Rubs palms, backs of hands and area between fingers.
Yes	No	Rinses, allowing water to run down over hands.
Yes	No	Uses paper towel to dry thoroughly from finger tips to elbows.
Yes	No	Turns off water with paper towel to avoid contaminating hands.

Competency Evaluator Signature: _____

Date: _____

Patient Care in Radiography, SMH mandatory testing booklet. Reviewed 9/18 kcb

Fulton-Montgomery Community College

Radiologic Technology Program

STUDENT EVALUATION

VITAL SIGNS COMPETENCY

Student Name: _____ **Date** _____

Directions: Students will pair up into groups of four and perform simulations on group members after demonstration from Instructor. Prior to each skill competency, the student is to introduce themselves to the patient, explain the examination, identify the patient using two forms of identification (Name and DOB), complete hand hygiene, and don gloves. After each competency is performed, the student removes and disposes of gloves into waste container and performs hand hygiene.

Radiographers are expected to be familiar with the ASRT practice standards, ASRT scope of practice, ARRT standards and rules of Ethics, and their practicing State licensure laws, as well as their clinical site protocols. This activity is for educational purposes.

VITAL SIGNS MONITOR

STEP 1 – PERFORM:

- | | | |
|-----|----|---|
| Yes | No | Student locates vital signs monitor, and checks to make sure that all equipment is accounted for (Temperature probe, Pulse Oximeter, Blood Pressure Cuff, and stethoscope). |
| Yes | No | Student unplugs the electrical cord and brings the monitor to the patient care area. |
| Yes | No | Student turns on the vital signs monitor by hitting power button on right lower corner of the monitor. |
| Yes | No | When finished with vital signs monitor, bring the monitor back to the original location and plug monitor into appropriate electrical outlet. |

STEP 2 – ANALYZE:

- 1.) How long will the monitor operate after being disconnected from the electrical outlet?
_____ hours.

TEMPERATURE - Oral Method Thermometer

STEP 1 – PERFORM:

Yes No Performs hand hygiene, wears gloves, and identifies patient using 2 identifiers.

Yes No Disposable sleeve applied to probe.

Yes No Turn on thermometer.

Yes No Inserts probe on the bottom side of the patient's cheek, instructs patient to keep lips closed.

Yes No Documents temperature when signal given by power unit.

Yes No Discards disposable sleeve.

Yes No Remove and discard gloves.

Yes No Repeats hand hygiene.

Yes No Turns off thermometer

TEMPERATURE - Otic Method Thermometer

Yes No Performs hand hygiene, wears gloves, and identifies patient using 2 identifiers.

Yes No Apply disposable cover to probe.

Yes No Pull ear lobe down and posterior.

Yes No Place probe in the ear canal.

Yes No Hit button on the probe to obtain the reading.

Yes No Document the temperature reading.

Yes No Remove and discard gloves, perform hand hygiene.

Yes No Place the thermometer in the receptacle.

TEMPERATURE - Temporal Method Thermometer

Yes No Performs hand hygiene, wears gloves, and identifies patient using 2 identifiers.

Yes No Clean the round ball probe at the end of the device with a alcohol prep pad.

Yes No Place probe on the center of the forehead.

Yes No Draw down across the forehead to the front of the ear.

Yes No Place the thermometer back in its original location.

- 1.) What temperature reading was obtained?
 1. Oral: _____
 2. Otic: _____
 3. Temporal: _____
- 2.) What is the normal average oral temperature for adults and pediatrics? _____.
- 3.) Every facility is different with the method in recording temperature. What other methods can a vital signs monitor track and document temperature? _____ and _____.

- | | | |
|-----|----|---|
| Yes | No | Palpation of pulse at base of thumb (radial artery). |
| Yes | No | Compresses fingers gently but firmly on patient's wrist held palm down. |
| Yes | No | Counts 30 seconds and then multiplies by 2. Note if irregular pulse count, count for 60 seconds. |
| Yes | No | Knows if radial pulse is weak to use carotid artery.
Note: Dorsalis pedis or pedal pulse is taken if there is a question of compromise in peripheral circulation. Example: arteriography |
| Yes | No | Documents pulse. |

- 1.) What pulse reading was obtained? 1. _____ beats/min.
2. _____ beats/min.
3. _____ beats/min.
- 2.) What is the normal pulse for adults? _____ beats/min.
- 3.) What is the normal pulse for pediatrics? _____ beats/min.

- | | | |
|-----|----|---|
| Yes | No | Observe Pulse Oximeter probe. Notice the finger nail icon on probe. |
| Yes | No | Squeeze the spring control on the probe. |
| Yes | No | Place probe on patient's finger with finger nail icon in the up position. |
| Yes | No | Release squeeze spring and observe monitor to document pulse. |

STEP 2 – ANALYZE:

- 1.) What pulse oximetry reading was obtained? 1. _____ %
2. _____ %
3. _____ %
- 2.) What is the normal pulse oximetry for adults? _____ %
- 3.) What is the normal pulse oximetry for pediatrics? _____ %

RESPIRATIONS

STEP 1 – PERFORM:

- Yes No Counts respirations per minute by visualizing rise and fall of the chest. OR
- Yes No Places hand on diaphragms and feels rise and fall of the chest.
(For this exercise, students will perform both methods).
- Yes No Document findings.

STEP 2 – ANALYZE:

- 1.) What respiration reading was obtained through visualization?
1. _____ breaths/min.
2. _____ breaths/min.
3. _____ breaths/min.

What respiration reading was obtained through palpation?

1. _____ breaths/min.
2. _____ breaths/min.
3. _____ breaths/min.
- 1.) What is the normal respiration count for adults? _____ breaths/min.
- 2.) What is the normal respiration count for pediatrics? _____ breaths/min.

BLOOD PRESSURE VIA VITAL SIGNS MONITOR

STEP 1 – PERFORM:

- Yes No Student places the blood pressure cuff on the patient's arm that does not have an IV or access port. Note: See picture on cuff for proper placement.
- Yes No Visualize the monitor for proper blood pressure reading and document findings.

STEP 2 – ANALYZE:

- 1.) What arm was the blood pressure cuff placed on? 1. _____
2. _____
3. _____

- 2.) What was the systolic blood pressure reading? 1. _____
2. _____
3. _____
- 3.) What was the diastolic blood pressure reading? 1. _____
2. _____
3. _____
- 4.) Using the systolic and diastolic measurements, how would you properly document the blood pressure?
1. _____ / _____.
2. _____ / _____.
3. _____ / _____.
5.) What does the systolic reading measure? _____.
- 6.) What does the diastolic reading measure? _____.

BLOOD PRESSURE MANUAL METHOD

STEP 1 – PERFORM:

- | | | |
|-----|----|--|
| Yes | No | Performs hand hygiene and explains the procedure to the patient. |
| Yes | No | Cleans ear tips on stethoscope with alcohol prep pad. |
| Yes | No | Patient sitting or lying down. Places cuff at level of the heart. May use either arm (If no access device is present on either arm). |
| Yes | No | Wraps the cuff snugly with the bottom edge above the antecubital space. |
| Yes | No | Places gauge where it can be easily read. |
| Yes | No | Palpates the brachial artery pulse in the antecubital space or the radial artery with finger tips. |
| Yes | No | Tighten the screw on the air pump, inflate the cuff while continuing to palpate the artery while noting on the gauge where the pulse disappears. |
| Yes | No | Deflate the cuff and wait 1 minute. |
| Yes | No | Place stethoscope in the ears, and place the diaphragm of the stethoscope over the brachial artery while the cuff remains on the arm. |
| Yes | No | Tighten the screw on the air pump, inflate the cuff to 30 mm Hg above the point where the pulse disappeared previously. |
| Yes | No | Opens valve on the pump and slowly releases the pressure. |
| Yes | No | Listens for the beat of the pulse while watching the gauge. Note the figure at which the pulse is heard, this is the systolic reading. |

- | | | |
|-----|----|---|
| Yes | No | When pressure is released and sound becomes much softer, document this point.
Note: this is the diastolic reading. |
| Yes | No | Releases remaining pressure. |
| Yes | No | Removes cuff and record results (e.g. 140/86) |
| Yes | No | Cleans ear tips on stethoscope with alcohol and return equipment to its proper place. |

TABLE 15-1

Normal Vital Signs

Sign	Range
Temperature (Varies With Meter Type)	97.6°-100° F (36.5°-37.8° C) (method of measurement is also charted as follows)
Average oral	98.6° O
Average tympanic	97.6° T
Average temporal artery	100° TA
Average rectal	99.6° R
Average axillary	97.6° A
Respirations	
Adult	12-20 breaths/min
Child	20-30 breaths/min
Pulse	
Adult	60-100 beats/min
Child	70-120 beats/min
Blood Pressure	
Systolic	<120 mm Hg
Diastolic	<80 mm Hg

Obtained from:

Adler, A., & Carlton, R. (2016). *Introduction to Radiologic & Imaging Sciences & Patient Care* (6th ed.). St. Louis, MO: Elsevier.

Instructor/Clinical Competency Evaluator _____

DATE: _____

Fulton-Montgomery Community College
Radiologic Technology Program
STUDENT EVALUATION
General Patient Care Competency
Sterile and Medical Aseptic Technique

Radiographers are expected to be familiar with the ASRT practice standards, ASRT scope of practice, ARRT standards and rules of Ethics, and their practicing State licensure laws, as well as their clinical site protocols. This activity is for educational purposes.

Name: _____ **Date:** _____

Handling and disposal of Contaminated Items and Waste

The Student:

- | | | |
|-----|----|---|
| Yes | No | Disposable items are discarded or after one use and in the proper container.
(Exception: emesis basins – immediately rinsed and reused for the same patient) |
| Yes | No | Objects contaminated with blood/body fluids are discarded in suitable container marked with the biohazard symbol. |
| Yes | No | Needles are never recapped and are disposed of in a Sharp's container. |
| Yes | No | Syringes are disposed of in Sharp's container. |

Establishing Sterile Field
Sterile tray and/or package

The Student:

- | | | |
|-----|----|---|
| Yes | No | Opens the first corner of a sterile item away from self. |
| Yes | No | Opens one side by grasping corner tip. |
| Yes | No | Opens the opposite side in the same manner. |
| Yes | No | Pulls remaining corner toward self
If there is an inner wrapper the procedure above is followed. |

Sterile field now established.

Adding a Double Wrapped Item to the Sterile Field

The Student:

- | | | |
|-----|----|--|
| Yes | No | Holds item in dominant hand. |
| Yes | No | Opens outer wrap away from body. |
| Yes | No | Proceeds as sterile tray unpackaging as written above. |

Yes No Grasps 4 corners with the non-dominant hand.

Yes No Places Item on sterile field.

Adding Disposable Item to the Sterile Field

The Student:

Yes No Peels down wrapper on item to be used.

Yes No Inverts package so to drop item onto sterile field.

Adding Liquids to the Sterile Field

The Student:

Yes No Checks the label of the liquid to be poured.

Yes No Cleansed lip of bottle by squirting/draining small amount of liquid into waste container.

Yes No Carefully pours liquid in a sterile basin or receptacle on tray.

Sterile Scrub Procedure

The Student:

Yes No Dons a cap or hood, mask, protective goggles if indicated.

Yes No Using foot/knee levers adjust water temperature and flow.

Yes No Hands are above the elbows, wets hands and forearms.

Yes No Avoids splashing of cloths.

Yes No Thoroughly washes hands and arms.

Yes No Uses brush in a circular motions, to scrub nails and hands minimum of one minute.

Yes No Discards brush.

Yes No Rinses thoroughly, keeping hand above the elbow.

Yes No Dries thoroughly, using a sterile towel, starting with the fingers.

Sterile Gowning/Gloving

The Student:

- | | | |
|-----|----|---|
| Yes | No | Removes gown from package, using the sterile field technique. |
| Yes | No | Allows gown to unfold with the inside toward self. |
| Yes | No | Inserts arms into sleeves with out protruding the hands. |
| Yes | No | Using the dominant hand, remaining in the sleeve, picks up glove for the non-dominant hand. |
| Yes | No | Inserts non-dominant hand into glove. |
| Yes | No | Stretches glove over gown. |
| Yes | No | Non-dominant hand picks up second glove. |
| Yes | No | Inserts fingers of dominant hand into glove. |
| Yes | No | Stretches glove over the cuff of the gown. |
| Yes | No | Separates waste tie from the gown. |
| Yes | No | Passes tab to an assistant turns wrapping gown around the waist and ties. |

Opening Sterile Glove Technique

The Student:

- | | | |
|-----|----|---|
| Yes | No | Demonstrates hand hygiene. |
| Yes | No | Selects appropriate size gloves. |
| Yes | No | Opens outer wrapper to expose inner wrapper. |
| Yes | No | Exposes gloves-opens ends facing self. |
| Yes | No | Puts first glove on touching only the inner surface of the folded cuff. |
| Yes | No | Using gloved hand, grasps and unfolds cuff. |
| Yes | No | Puts on second glove and unfolds cuff. |
| Yes | No | When complete, the student keeps his/her hands in from of the body at a safe distance from non-sterile field. |

Preparation for Examination in an Isolation Room Using a Mobile Unit-Gowning

Note: One technologist remains outside of the isolation room while the other technologists enters following this protocol.

The student:

- | | | |
|-----|----|--|
| Yes | No | Puts on a lead apron. |
| Yes | No | Dons Cap/hood, making sure all hair is covered. |
| Yes | No | Dons mask, making sure nose and mouth are completely covered. Pinches nose piece securely. |
| Yes | No | Puts gown on, making sure the uniform is completely covered. |
| Yes | No | Dons protective gloves. |
| Yes | No | Inserts image receptor into a plastic cover or bag. |

Removing Isolation Gown

The Student:

- | | | |
|-----|----|--|
| Yes | No | First, unties waist. |
| Yes | No | Grasps gloves from outside and pulls off. |
| Yes | No | Inserts clean finger inside cuff of the second glove and removes glove. |
| Yes | No | Demonstrates hand hygiene. |
| Yes | No | Removes masks by ties only, discards in room in correct container. |
| Yes | No | Removes gown folding contaminated surface inward, discards in correct container. |
| Yes | No | Repeats hand hygiene. |
| Yes | No | Disinfects mobile unit. |

Competency Evaluator Signature: _____

Date: _____

2/06, Reviewed kl 8/19

Patient Care in Radiography, Ehrlich 6th Edition

Ellis Hospital, St. Mary's Hospital, FMCC Nursing Program

Fulton-Montgomery Community College
Radiologic Technology Program
STUDENT EVALUATION
VENIPUNCTURE COMPETENCY SIMULATION

Radiographers are expected to be familiar with the ASRT practice standards, ASRT scope of practice, ARRT standards and rules of Ethics, and their practicing State licensure laws, as well as their clinical site protocols. This activity is for educational purposes.

Student Name: _____ **Date** _____

Competency

Room/supply preparation

- | | | |
|-----|----|---|
| Yes | No | 1. Examines and cleans room before escorting patient in |
| Yes | No | 2. Have all supplies available: towel, tourniquet, and
syringes, needles, butterflies, alcohol swipes, 2x2 sterile
gauze, contrast media, emesis basin, tape. |

Patient Preparation/Education

- | | | |
|-----|----|--|
| Yes | No | 1. Correctly identifies patient |
| Yes | No | 2. Educate in terms patient understands |
| Yes | No | 3. Explain procedure in steps |
| Yes | No | 4. Display a confident attitude |
| Yes | No | 5. History of allergies |
| Yes | No | 6. Current medications patient is currently taking |
| Yes | No | 7. Check kidney function laboratory values per site protocol
(BUN, creatinine, GFR) |

Infection Control

- | | | |
|-----|----|--|
| Yes | No | 1. Uses gloves |
| Yes | No | 2. Draws up syringe using sterile technique |
| Yes | No | 3. Has appropriate size butterfly/ IV cathalon available |

Site Selection

- | | | |
|-----|----|---|
| Yes | No | 1. Selects suitable location |
| Yes | No | 2. Checks Condition of vein |
| Yes | No | 3. Uses appropriate veins (posterior hand, antecubical) |

Site Preparation

- | | | |
|-----|----|--|
| Yes | No | 1. Skin surface prepared/cleaned |
| Yes | No | 2. Clip hair if appropriate |
| Yes | No | 3. Uses antiseptic |
| Yes | No | 4. Contact with skin 30 seconds |
| Yes | No | 5. Cleans in circular motion from center to 2 inches out |

Venipuncture

- | | | |
|-----|----|---|
| Yes | No | 1. Tourniquet 3 inches above site |
| Yes | No | 2. Holds patient limb |
| Yes | No | 3. Using thumb stabilize / anchors selected vein |
| Yes | No | 4. Place needle 45 degrees angle to skin surface |
| Yes | No | 5. Enters skin at a 15 degree angle |
| Yes | No | 6. Vein punctured |
| Yes | No | 7. Blood return |
| Yes | No | 8. Releases tourniquet |
| Yes | No | 9. Blood return again |
| Yes | No | 10. Anchor needle with tape |
| Yes | No | 11. Remove needle when done, applies direct pressure to site. |

Administration

- | | | |
|-----|----|---|
| Yes | No | 1. Administer contrast at an established rate |
| Yes | No | 2. Observe site for infiltration or extravasation |
| Yes | No | 3. Note patient condition, coloring, and any signs of a reaction. |

Competency Evaluator's Signature: _____DATE:_____

We use a phantom for the venipuncture competency. 2017 KL, Reviewed 8/19 KL

Fulton-Montgomery Community College
Radiologic Technology Program
STUDENT EVALUATION
General Patient Care
Transfer of Patient Competency

Name: _____ **Date:** _____

Yes No Student identifies patient and assesses fall risk (To be Completed prior to each transfer).

Wheelchair to X-Ray Table

The Student:

Yes No Knows the function of the parts of a wheelchair (brakes, footrest)

Yes No Introduces self to the patient and assesses the patient's ability to help move from the bed to the wheelchair.

Yes No Obtains necessary equipment. (IV bottle/bag, oxygen, urinary bag)

Yes No Checks with nursing for disconnecting any equipment

Yes No Explains to the patient what he/she is about to do and what is expected of them.

Yes No Places wheelchair close to step stool

Yes No Locks brakes, raises footrests, assists patient to stand

Yes No Assists patient with stepstool if necessary

Yes No Assists patient to pivot and sits patient on the table top

Yes No Supports the patient's shoulders while raising lower legs onto the table.

Yes No Eases patient to the supine position.

X-Ray Table to Wheelchair

The Student:

Yes	No	Positions wheelchair parallel to the bed, wheels locked, footrests up and out of the way.
Yes	No	Lowers bed and lowers side rails if applicable.
Yes	No	Assists patient while pivoting, allowing legs to hang over the side of the bed.
Yes	No	Face to face with the patient, places feet on side of patient's feet with knees to patient's knees.
Yes	No	Wraps arms around patient
Yes	No	Lifts and pivots patient until the patient's legs are against the seat of the wheelchair and then sits patient down.
Yes	No	Adjust footrests and covers patient

Stretcher to Radiographic Table

The Student:

Yes	No	Utilizes plexiglass slide board
Yes	No	Explains to the patient what he/she will be doing
Yes	No	Explains to the patient what is expected of them
Yes	No	Reassures patient of ease of transfer
Yes	No	Raises bed to appropriate level and lowers side rail closest to stretcher
Yes	No	Moves stretcher against bed, locks stretcher
Yes	No	Tells the patient to roll up on side that is away from the stretcher. If the patient cannot help, gets assistance
Yes	No	Slide board under draw sheet half way, remaining half of board on the stretcher
Yes	No	Has patient fold arms over chest
Yes	No	Staff grips draw sheet and slides the patient safely, smoothly across the board onto the stretcher
Yes	No	May leave board under patient if possible or removes from under patient
Yes	No	Lifts side rails up locked into position and unlocks brakes
Yes	No	Uses same methodology to transfer patient from the stretcher to the Radiographic table

Patient Transfer Competency Verification

Student: _____

Date: _____

Evaluator: _____

Source: Patient Care In Radiography, Ehrlich, 6th Ed. KCB Revised: 2018, 9/28/2023

Fulton-Montgomery Community College
Radiologic Technology Program
STUDENT EVALUATION
General Patient Care – Care of Medical Equipment
Oxygen Administration Competency

Name: _____ Date: _____

Radiographers are expected to be familiar with the ASRT practice standards, ASRT scope of practice, ARRT standards and rules of Ethics, and their practicing State licensure laws, as well as their clinical site protocols. This activity is for educational purposes.

Oxygen Administration

Nasal Cannula

Yes No Checked to see if air flowing through cannula before placing on patient.

Yes No Adjust correct liters per minute.

Yes No Correctly place on patient.

(Place cannula in nose, secure with tubing around the ears, adjust tension comfortably)

Oxygen Mask

Yes No Checked to see if oxygen flowing through tubing.

Yes No Adjust correct liters per minute.

Yes No Correctly places mask on patient.

(Place mask over the nose and mouth and slip elastic band behind patient's head,
adjust as needed for comfort and proper flow to patient)

Ceiling/Wall Mount Oxygen Flow meter

Yes No Turn gauge to manipulate oxygen.

Yes No Manipulate flow rate by level of the ball in the gauge.

Yes No Flow meter off.

Portable Oxygen Tank

- | | | |
|-----|----|--|
| Yes | No | Turns lever counterclockwise to open tank.
(This step not needed on most hospital tanks) |
| Yes | No | Adjusts flow by turning knob to ordered liter flow.
(Often ordered liter flow not available on tank, if liter flow not available go to next higher setting) |
| Yes | No | Successfully reads gauge for amount of oxygen pressure left in the tank. |
| Yes | No | Manipulates flow rate appropriately. |
| Yes | No | Turn oxygen off. |

Removing Oxygen From a Wall Unit to a Portable Unit

- | | | |
|-----|----|--|
| Yes | No | Notes flow rate. |
| Yes | No | If appropriate opens main valve on portable oxygen tank |
| Yes | No | Adjusts portable oxygen tank flow to match (if possible) flow on wall unit. |
| Yes | No | Disconnects tubes from wall unit and adjusts tubing to portable oxygen tank. |
| Yes | No | Shuts off wall supply. |
| Yes | No | Checks tubing, to make sure tubing is not tangled around patient. |
| Yes | No | Makes sure patient is comfortable. |

Instructor/Competency Evaluator:

Date: _____

(Revised: Peter Holtermann RT, kl 2013, Peter Holtermann 5/21/18).

Fulton-Montgomery Community College
Radiologic Technology Program
STUDENT EVALUATION
General Patient Care
Enema Bag Preparation Competency &
Enema Tip Insertion Competency

Student Name: _____ Date _____

Radiographers are expected to be familiar with the ASRT practice standards, ASRT scope of practice, ARRT standards and rules of Ethics, and their practicing State licensure laws, as well as their clinical site protocols. This activity is for educational purposes.

Proper steps obtained from the *Textbook of Radiographic Positioning and Related Anatomy*, Bontrager and Lampignano, 8th edition. Some steps added based off of Procedural Considerations.

Setup Competency:

- | | | |
|-----|----|---|
| Yes | No | <u>STEP 1:</u> Ensure all necessary equipment and supplies are gathered (Includes: Barium bag with Enema attached, IV pole, balloon inflator device, blue air pump device, lubrication packets or tube, Kelley clamps). |
| Yes | No | <u>STEP 2:</u> Place bag of barium on IV pole by placing the hole in the clear bag on the IV pole. |
| Yes | No | <u>STEP 3:</u> Attach balloon inflator device to the clear small tubing attached to the enema. |
| Yes | No | <u>STEP 4:</u> Test the functioning ability of the balloon by squeezing the balloon inflator device. Clamp the balloon inflator device with the yellow tubing stopcock using your other hand while keeping the balloon inflated in order to see if air is escaping from the enema balloon. |
| Yes | No | <u>STEP 5:</u> If the enema balloon fills with air, expands, and functions properly, un-clamp the yellow stopcock and keep the inflator device attached for use after enema is inserted into patient. If the balloon on the enema is damaged, dispose of the enema kit and replace with another. |
| Yes | No | <u>STEP 6:</u> Clamp the blue tubing stopcock on the tubing that connects the Enema bag from the enema. |
| Yes | No | <u>STEP 7:</u> Fill the enema bag with appropriate amount of barium sulfate suspension. If there is dry barium already in the bag, follow site protocol for the amount of water to be added into the dry barium in the enema bag. Other sites will use pre-mixed barium sulfate suspension or 2 containers of oral barium sulfate and pour contents into enema bag.
<u>**IMPORTANT NOTE:</u> Be sure that water used for mixing is Room Temperature (85 to 90 degrees F). Hot water may scald the mucosal lining of the colon. |

- | | | |
|-----|----|---|
| Yes | No | STEP 8: **STEP ONLY REQUIRED IF DOING A DOUBLE CONTRAST BARIUM ENEMA. Attach clear piece on blue air pump device to the blue tubing that is connected to the enema. |
| Yes | No | STEP 9: Move Barium bag on IV pole to appropriate spot in the room that will be appropriate during the procedure. |
| Yes | No | STEP 10: Place a clean sheet on the table and rest the enema tip on the clean sheet OR coil up tubing and place enema tip on opposite end of the IV pole. Be sure to prevent the enema from hitting the ground or making contact with other unclean surfaces prior to insertion. |

Instructor/Clinical Competency Evaluator _____

DATE: _____

Procedure Competency:

- | | | |
|-----|----|---|
| Yes | No | STEP 1: Student describes the tip insertion procedure to the patient. Answer any questions. |
| Yes | No | STEP 2: Place the patient in Sims' position. The patient should lie on the left side, with the right leg flexed at the knee and hip. |
| Yes | No | STEP 3: Shake the enema bag once more to ensure proper mixing of barium sulfate suspension. Un-clamp the blue tubing stopcock to allow barium to flow through the tubing and from the tip to remove any air in the system. |
| Yes | No | STEP 4: Wearing gloves, coat the enema tip well with water-soluble lubricant. |
| Yes | No | STEP 5: On expiration, direct the enema tip toward the umbilicus approximately 2.5 to 4 cm (1 to 1 ½ inches). (For simulation purposes, students will insert enema into a water bottle to simulate insertion into anus and rectum). |
| Yes | No | STEP 6: After initial insertion, advance up superiorly and slightly anteriorly. The total insertion should not exceed 3 to 4 cm (1 ¼ to 1 ½ inches). Enema should be inserted past balloon on enema to ensure proper inflation.
<i>Do not force enema tip.</i> |
| Yes | No | STEP 7: Tape tubing in place to prevent slippage. Do not inflate retention tip unless directed by the radiologist (Instructor in this case). When directed to inflate the balloon with the balloon inflator, be sure to clamp the inflator device with the yellow tubing stopcock. |
| Yes | No | STEP 8: Use the Kelley clamp to clamp the clear tubing that is attached to the enema. This will ensure that the balloon will not lose any air. |
| Yes | No | STEP 9: Ensure the intravenous pole/enema bag is no more than 60 cm (24 inches) above the table. Ensure the tubing stopcock (blue clamp) is in the closed position, and no barium flows into the patient. |

Yes No **STEP 10:** Unclamp the blue tubing stopcock to release barium into patient as instructed by Radiologist (Instructor in this case), and re-clamp the blue stopcock when a sufficient amount of barium has been released.

Post-Procedure Competency:

Yes No **STEP 1:** Once the exam is completed and the Radiologist has obtained all necessary fluoroscopic imaging, retrieve a trash can.

Yes No **STEP 2:** Un-clamp the blue stopcock allowing barium to flow back into enema bag.

Yes No **STEP 3:** Place the enema bag in the garbage. (With the assistance of gravity, this will allow for more of the barium to exit the patient).

Yes No **STEP 4:** Deflate the balloon tip and gently pull enema tip out of the patient.

Yes No **STEP 5:** Discard the tip and tubing into the garbage with the enema bag.

Yes No **STEP 6:** Provide the patient with towels and direct them to the rest room and have them eliminate waste. (If patient is unable to ambulate to the bathroom, provide the patient with a commode and assist the patient with hygiene).

Yes No **STEP 7:** Perform Post-Evacuation images per Radiologist protocol.

Yes No **STEP 8:** Explain Discharge instructions to the patient.

Yes No **STEP 9:** Clean up the room and perform hand hygiene.

Instructor/Clinical Competency Evaluator _____

DATE:_____

Created: 2017 KCB. Revised: 2018 KCB, 4/4/19 KCB

Fulton-Montgomery Community College
Radiologic Technology Program
STUDENT EVALUATION
Inserting an Indwelling Foley Catheter
***Document obtained from NUR 106 FMCC Nursing Program**

Student:

Date:

Radiographers are expected to be familiar with the ASRT practice standards, ASRT scope of practice, ARRT standards and rules of Ethics, and their practicing State licensure laws, as well as their clinical site protocols. This activity is for educational purposes.

Directions: Check mark whether student met or did not meet expectation and make any comments for each step

Expected Outcome: The Foley Catheter will be correctly inserted while maintaining sterile technique with minimal discomfort and no injury to the client.

Procedure Steps	Met	Not Met	Comments
1. Confirm order for insertion of indwelling urinary catheter.			
2. ID client and explain what you are going to do, answering any questions, and identify any allergies to latex or Iodine			
3. Perform hand hygiene			
4. Provide patient privacy			
5. Raise the level of client's bed to a comfortable working height and stand on client's right side if your right handed or on left side if you are left handed			
6. Place garbage close to your feet without contaminating hands			
7. Assist with client positioning			
8. Apply clean gloves and appropriately perform perineal care. Remove gloves and perform hand hygiene			
9. Open sterile catheterization kit, and any needed supplies, according to manufacturer directions, maintaining sterile technique			
10. Put on sterile gloves and place drape under client maintaining sterile technique			
11. Open and prepare all supplies, lubricate 1" to 2" of catheter tip and place back in sterile box. Place box on sterile field between client's legs if appropriate or leave on over-bed table			

12. For female, using thumb and forefinger of non-dominate hand to spread labia and visualize meatus, leaving this hand there until catheter is inserted. For male, use non-dominate hand to hold/support penis for good visualization of meatus			
13. Appropriately cleanse meatus with antiseptic swabs or cotton balls, using one cotton ball/swab for each stroke			
14. With dominate hand, slowly insert catheter into urethra as appropriate for gender			
15. Inject entire volume of sterile water in the syringe to blow up the balloon of catheter while securely holding the catheter at the meatus with your non-dominate hand			
16. Gently pull on catheter after the balloon is inflated to feel resistance and secure drainage bag lower than level of bladder			
17. Remove gloves and secure catheter to inner thigh with securement device, per facility policy, leaving slack in catheter for leg movement			
18. Assist client to comfortable position and cover with linens. Lower height of bed and place call light within reach			
19. Dispose of used supplies and wash hands			

Additional Evaluator Comments:

First Attempt_____

Second Attempt_____

Evaluator signature:

Date:

Student signature:

Date:

(Student signature does not imply agreement but acknowledgment of performance).

Fulton-Montgomery Community College
Radiologic Technology Program
Student Evaluation
General Patient Care – Care of Patient Medical Equipment (e.g. IV Tubing)

Name: _____ Date: _____

Radiographers are expected to be familiar with the ASRT practice standards, ASRT scope of practice, ARRT standards and rules of Ethics, and their practicing State licensure laws, as well as their clinical site protocols. This activity is for educational purposes.

Directions: Prior to each skill competency, the student is to introduce themselves to the patient, explain the examination, identify the patient using two forms of identification (Name and DOB), complete hand hygiene, and don gloves. After each competency is performed, the student removes and disposes of gloves into waste container and performs hand hygiene.

Drawing Up Medication from a Vial

- | | | |
|-----|----|---|
| Yes | No | Obtain medications and filter needle. |
| Yes | No | Check the expiration date on the medication vial. |
| Yes | No | Pop off the cap of the medication vial if it is a new vial and wipe top of medication vial with alcohol prep pad. |
| Yes | No | Secure the filter needle on the tip of the empty syringe |
| Yes | No | Take syringe and aspirate volume of air equal to first medication's dosage. |
| Yes | No | Insert filter needle attached to the syringe into the center of the medication vial. |
| Yes | No | Inject air in the empty syringe into the medication vial without allowing filter needle to touch solution. (If you put air into the solution when you withdraw the medication out of the vile, it will have bubbles in it). |
| Yes | No | Turn vial upside down, holding it in non-dominant hand. |
| Yes | No | Gently push plunger up and the barrel of the syringe will fill with proper amount of medication. |
| Yes | No | Place medication vial back on a flat surface. |
| Yes | No | Withdraw needle from vial. |
| Yes | No | Confirm point on syringe for correct amount and dosage of medication. |
| Yes | No | Put the safety on the needle and place the syringe filled medication on the table for the Radiologist to utilize for the procedure. |

- | | | |
|-----|----|--|
| Yes | No | After the Radiologist has given medication: Dispose of soiled needle in sharps container and other supplies in appropriate waste containers. |
| Yes | No | Perform hand hygiene. |

Giving Medication Via NG Tube Or G-Tube

- | | | |
|-----|----|---|
| Yes | No | Explain procedure to the patient. |
| Yes | No | Prepare the medication to be administered prior to entering the room. |
| Yes | No | Verify the correct patient using two forms of identification. |
| Yes | No | Verify placement via x-ray or hospital policy. |
| Yes | No | Head of the bed is up at least 30 degrees. |
| Yes | No | Check for residual fluid in the stomach. (If more than 100 cc's, check policy of facility to ensure ability to give contrast medication). |
| Yes | No | Flush tubing with 20-30 cc's water to verify line is patent. |
| Yes | No | When verified, place medication in syringe and give to patient via tube, flush tube again with 25-30 cc's water. |

Flushing of Saline Lock

- | | | |
|-----|----|---|
| Yes | No | Cleanse port of saline lock with alcohol prep pad. |
| Yes | No | Note site and check for redness, streaking, pain, or extravasation into tissue. |
| Yes | No | Slowly inject saline solution through access port noting pain or edema. |
| Yes | No | Student will note that saline goes in easily without discomfort. |

Instructor/Competency Evaluator:

Date:

Created: 2017 TC. Revised: 6/1/18 KCB, 6/5/19 KCB/TC, 10/23/20 KCB/TC

Fulton-Montgomery Community College
Radiologic Technology Program
STUDENT EVALUATION
Medication Administration Competency Skill Evaluation
***Document obtained from NUR 106 FMCC Nursing Program**

Student_____ Date_____

Radiographers are expected to be familiar with the ASRT practice standards, ASRT scope of practice, ARRT standards and rules of Ethics, and their practicing State licensure laws, as well as their clinical site protocols. This activity is for educational purposes.

Directions: Check mark whether student met or did not meet expectation and make any comments for each step
Expected Outcome: medication doses will be accurately and safely administered via the appropriate route using proper technique without causing injury or harm to the patient

Procedure Steps	Met	Not Met	Comments
1. Verify medication order and client allergies			
2. Know the drug's trade & generic names indications for use, recommended safe dose range, frequency, route, time of onset & peak action, common side effects, possible drug interactions, contraindications, and nursing considerations. (student may look up med in drug book)			
3. Look at applicable laboratory values, if indicated, to determine the safety of administering the medication			
4. Evaluates client's educational needs related to prescribed medication and educates client as indicated			
5. Recognizes when a medication should not be given and/or identifies any special considerations for medication preparation or administration			
6. Performs hand hygiene			
7. Properly follows the eight rights of medication administration in the preparation & administration of medications (right patient, medication, dose, route, time, documentation, reason, and response)			
8. Performs hand hygiene and applies PPE as indicated			
9. Compares the medication with the client's MAR			
10. Accurately calculates the correct medication dosage			
11. Safely utilizes proper technique when preparing medications via the prescribed routes (oral, topical, or parenteral)			
12. Rechecks medication with MAR after it is prepared			

13. Gathers needed supplies for medication administration, including MAR, and takes into client's room			
14. Introduces self & identifies client using 2 identifiers and verifying against MAR.			
15. Explains to patient, what you're going to do and answers any questions			
16. Safely administers the medication, following proper technique for the prescribed route (oral, topical, or parenteral)			
17. Assists patient to a comfortable position with call light within reach			
18. Removes gloves, washes hands			
19. States the correct documentation of the medication administration			

Additional Comments:

First Attempt_____

Second Attempt_____

Evaluator's Signature:_____

Student Signature:_____

(Student signature does not imply agreement but acknowledgment of performance)

MASTER CHECKLIST: PROFICIENCIES&PERFORMS/COMPETENCY

Student Name: _____ **Class of:** _____

Technologist Date and Initial each Proficiency Exam and Sign for Competency

Radiologic Procedure Mandatory	P 1	P 2	P3				Competency
Chest and Thorax							
1. Chest Routine							
2. Chest AP (Wheelchair or Stretcher)							
3. Ribs							
Upper Extremity							
4. Thumb or Finger							
5. Hand							
6. Wrist							
7. Forearm							
8. Elbow							
9. Humerus							
10. Shoulder							
11. Clavicle							
12. Trauma: Shoulder or Humerus (Scapular Y, Transthoracic or Axial)*							
13. Trauma: Upper Extremity (Non-shoulder)*							
Lower Extremity							
14. Foot							
15. Ankle							
16. Knee							
17. Tibia-Fibula							
18. Femur							
19. Trauma: Lower Extremity*							
Spine and Pelvis							
20. Cervical Spine							
21. Thoracic Spine							
22. Lumbar Spine							
23. Cross-Table (Horizontal Beam) Lateral Spine (Patient Recumbent)							
24. Pelvis							
25. Hip							

Radiologic Procedure Mandatory	P1	P2	P3	P4	P5	P6	Competency
26. Cross-Table (Horizontal Beam) Lateral Hip							
Abdomen							
27. Abdomen Supine							
28. Abdomen Upright							
Mobile C-Arm Studies							
29. C-Arm Procedure (Requiring Manipulation to Obtain More Than One Projection)							
30. C-Arm Procedure (Requiring Manipulation Around a Sterile Field)							
Mobile Radiographic Studies							
31. Chest							
32. Abdomen							
33. Upper or Lower Extremity							
Pediatric Patient (Age 6 or Younger)							
34. Chest Routine							
Geriatric Patient (At Least 65 Years Old and Physically or Cognitively Impaired as a Result of Aging)							
35. Chest Routine							
36. Upper or Lower Extremity							
*TRAUMA is considered a serious injury or shock to the body and requires modifications in positioning and monitoring of the patient's condition.							
Radiologic Procedure Elective	P1	P2	P3	P4	P5	P6	Competency
Chest and Thorax							
1. Chest Lateral Decubitus							
2. Sternum							
3. Upper Airway (Soft- Tissue Neck)							
4. Sternoclavicular Joints							
Upper Extremity							
5. Scapula							
6. AC Joints							
Lower Extremity							
7. Toes							
8. Patella							
9. Calcaneus							
Head							
*Candidates must select at least one elective procedure form this section.							
10. Skull							
11. Facial Bones							
12. Mandible							
13. Temporomandibular Joints							
14. Nasal Bones							
15. Orbits							
16. Paranasal Sinuses							

Spine and Pelvis							
17. Sacrum and/or Coccyx							
18. Scoliosis Series							
19. Sacroiliac Joints							
Abdomen							
20. Abdomen Decubitus							
21. Intravenous Urography							
Fluoroscopy Studies:							
*Candidates must select either Upper GI or Contrast Enema PLUS one other elective procedure from this section.							
22. Upper GI Series, Single or Double Contrast							
23. Contrast Enema, Single or Double Contrast							
24. Small Bowel Series							
25. Esophagus (NOT Swallowing Dysfunction Study)							
26. Cystography/Cystourethrography							
27. ERCP							
28. Myelography							
29. Arthrography							
30. Hysterosalpingography							
Pediatric Patient (Age 6 or Younger)							
31. Upper or Lower Extremity							
33. Abdomen							
34. Mobile Study							
Geriatric Patient (At Least 65 Years Old and Physically or Cognitively Impaired as a Result of Aging)							
35. Hip or Spine							

General Patient Care		
In addition to the Imaging Procedures above, students must complete the following mandatory General Patient Care simulations.	Date Completed	Competence Verified By
CPR/BLS Certified		
Vital Signs – Blood Pressure		
Vital Signs – Temperature		
Vital Signs – Pulse		
Vital Signs – Respiration		
Vital Signs – Pulse Oximetry		
Sterile and Medical Aseptic Technique		
Venipuncture* *Venipuncture can be simulated by demonstrating aseptic technique on another person, but then inserting the needle into an artificial forearm or suitable device.		
Assisted Patient Transfer (e.g., Slider Board, Mechanical Lift, Gait Belt)		
Care of Patient Medical Equipment (eg., Oxygen Tank, IV tubing)		
NOTE: Inserting Date w/Initials signifies that the student has satisfactorily completed the task. The examiner or clinical supervisor must personally place their initials after the date. All clinical requirements must be successfully completed by the end of RAD 221.		

Retrieved from ARRT Radiography Didactic and Clinical Competency Requirements:

ARRT Clinical Requirements

- 36 Mandatory Imaging Procedures
- 15 Elective Imaging Procedures,
- CPR certified and 9 Mandatory General Patient Care Activities

Clinical Competency Requirements

- General Patient Care
Candidates must be CPR certified and demonstrate competence in the remaining nine patient care activities listed above. The activities should be performed on patients whenever possible, but simulation is acceptable.
- Imaging Procedures
Candidates must demonstrate competence in all 36 procedures identified as mandatory. Procedures should be performed on patients whenever possible. A maximum of eight mandatory procedures may be simulated if demonstration on patients is not feasible.

Candidates must demonstrate competence in 15 of the 34 elective procedures. Candidates must select at least one of the 15 elective procedures from the head section. Candidates must select either upper GI or contrast enema plus one other elective from the fluoroscopy section as part of the 15 electives. Elective procedures should be performed on patients whenever possible. If demonstration on patients is not feasible, electives may be simulated.

Clinical Snap Shot Evaluation

Subject:

Site:

Bi-Weekly Clinical Snap Shot Evaluation

PSYCHOMOTOR SKILLS:

Technical Factors

- 1 - Shows No Retention Of Skills
- 2 - Frequently Unable To Set Technique
- 3 - May Need Assistance With Technique
- 4 - Usually Sets Technique Without Guidance
- 5 - Sets Technique Without Guidance

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Equipment Manipulation

- 1 - Shows No Ability To Detent Tube/Bucky Or Manipulate Room Equipment
- 2 - Frequently Unable To Set Up Radiographic Room
- 3 - May Need Assistance With Equipment, Frequent Reminders About Detenting
- 4 - Usually Manipulates Equipment Without Guidance
- 5 - Detents Easily, Manipulates Equipment Without Guidance

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Collimation

- 1 - Shows No Application Of Collimation (Radiation Protection)
- 2 - Frequently Unable to set proper collimated field size
- 3 - May Need Assistance/Reminders To Collimate
- 4 - Usually Collimates
- 5 - Excellent Beam Restriction/Collimation Routinely Demonstrated (4-Sided Collimation)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Patient Positioning

- 1 - Makes No Effort To Position Patients
- 2 - Struggles With Positioning Patients
- 3 - Performs Most Positioning With Assistance
- 4 - Usually Works Independently
- 5 - Excels In Patient Positioning

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Safe Lifting And Transport

- 1 - Must Be Supervised, Cannot Adapt To Patient Care
- 2 - Student Requires Monitoring With Patients
- 3 - Uncomfortable Alone With Patients
- 4 - Better Than Normal Patient Care
- 5 - Excels In Patient Care, Adaptive To Patient Condition

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Organization

- 1 - Repeated Errors, Tasks Unfinished
- 2 - Work Is Messy, Not Organized
- 3 - Work Usually Organized
- 4 - Good Work Flow, Neat Records
- 5 - Keeps Concise, Accurate Records

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Markers

- 1 - Does Not Use Lead Markers
- 2 - Often Forgets To Use Lead Markers
- 3 - Needs Reminding For Lead Markers And Placement
- 4 - Usually Places Lead Markers Within Collimated Light Field
- 5 - Consistently Uses Lead Markers With Good Placement, Sends Images In Correct Organization

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Room Maintenance

- 1 - Will Not Clean/Stock Room
- 2 - Unwilling/Unmotivated To Clean Room When Asked
- 3 - Cleans Room When Asked Without Hesitation
- 4 - Maintains Room With Few Reminders
- 5 - Always Follows Procedures

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

COGNITIVE SKILLS:

Radiation Safety

- 1 - Makes No Use Of Guidelines
- 2 - Sometimes Ignores Guidelines
- 3 - Understanding Of Radiation Safety Guidelines
- 4 - Conscientious Of Radiation Safety Guidelines
- 5 - Always Follow Guidelines

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Image Quality

- 1 - Unable To Evaluate Quality Images
- 2 - Struggles Evaluating Images
- 3 - Has Difficulty Evaluating Images
- 4 - Usually Evaluates Images Using Prescribed Criteria
- 5 - Evaluates Image For Quality Using Optimal, Suboptimal, Repeatable Criteria, Using Textbook And Clinical Site Criteria

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

AFFECTIVE SKILLS:

Communication: Gives directions/obtains relevant medical history

- 1 - Unable/Refuses to Communicate with Patient
- 2 - Struggles with Patient Communication
- 3 - Entry Level Patient Communication
- 4 - Better Than Average Patient Communication
- 5 - Excellent Patient Communication

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Professionalism

- 1 - Unprofessional Behavior, Poor Hygiene
- 2 - Some Unprofessional Behaviors/ Poor Hygiene Noted
- 3 - Entry Level Professionalism And Hygiene
- 4 - Better Than Average Professionalism And Hygiene
- 5 - Excellent Professionalism And Hygiene

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Attendance

- 1 - Frequently Late, Excessive Absences
- 2 - Occasionally Late, Absences, May Not Call In
- 3 - On Time, Absences
- 4 - On Time, 1 Absence, Called In
- 5 - Prompt, No Absences

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Interpretation

- 1 - Unable To Interpret Requisition/Script Or Terms
- 2 - Struggles Interpretation Of Requisition/Script
- 3 - Requires Help Understanding Requisition/Script, Medical Terminology
- 4 - Average Interpretation Of Requisition/Script
- 5 - Excellent Interpretation Of Requisition/Script, Understands Most Medical Terminology

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Attitude And Interest

1 - Critical Of Others Or Clinical Site, Poor Attitude

2 - Lacks Enthusiasm, Unengaged

3 - Conscientious, Acknowledges Errors

4 - Good Attitude, Enthusiastic

5 - Excellent Attitude

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Initiative

1 - Shows No Initiative

2 - Hesitant To Work Act On Own

3 - Occasionally Needs Prompting

4 - Usually Works Without Prompting

5 - Self-Motivated

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Critical Thinking And Problem Solving

1 - Unable To Work Independently, Makes Poor/No Decisions

2 - Hesitant To Work Independently, Reluctant To Make Decisions

3 - Occasionally Works Independently, Needs Advice Frequently

4 - Usually Works Independently, Seeks Advice When Needed

5 - Independent Worker, Good Judgments

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Teamwork and Collaboration

1 - Student is a detriment to the team environment, unable to follow simple directions, or rules of supervision.

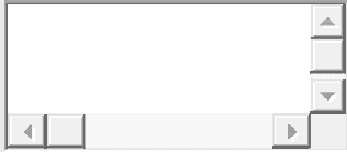
2 - Student rarely works well with others. Student is not receptive to feedback. Student frequently displays a flat affect while at clinical, no enthusiasm or initiative.

3 - Student is developing skills to work in a team. Student is easily flustered by suggestions of supervising technologists. Student is attempting to make minor improvements in work flow. Student is easily distracted, hindering communication in the team. Student constantly explains, or makes excuses for mistakes.

4 - Good in a team environment. Student communicates with technologists and is receptive to feedback. Overall the student attempts to improve based on feedback. Student displays a positive attitude.

5 - Excellent in a team environment. Student exhibits thorough, detailed communication with supervising technologists. Takes responsibility for actions, and makes changes. Consistently seeks constructive feedback for improvement. Demonstrates an enthusiastic can do attitude. This student consistently adds positivity to the work environment.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

Additional Comments:

Student Signature: Student may add signature by attaching a post-submission comment. To do so, student logs in using his/her user name and password. Then, go to Reports/Completed Evaluations. Select the evaluation template and hit apply; click View Details (looks like a folder at right of screen). Click on the plus sign (+) at the bottom next to Add Comment. Student will see a dropdown menu of all items on the evaluation; scroll down the list of items and select the Student Signature item.

☒ Enter

☐ Check to complete later, then click "Submit"

☒ Approved ☐ Not Approved

Grading:

5: 100

4: 85

3: 70

2: 55

1: 40

Clinical Feedback Form

Subject:

Site:

Clinical Feedback Form

Has the student's Skill Summary Page been reviewed with the student to ensure comp evals have been inputted by technologists in a timely manner? In the comments section, indicate what comp evals are missing and reach out to the technologist to fill out the form. Type, "N/A" if all comp evals are up to date.

- ☐ No
☐ Yes

Has the student's Daily Logsheet been approved for the week? In the comments section (click comment bubble at right), indicate if the student was counseled for not inputting daily logsheets on the day the exam was performed.

- ☐ No
☐ Yes

To date, how many comps does the student have?

Comments about clinical performance:

List student strengths:

List student weaknesses (areas for improvement) and for weaknesses listed, provide performance improvement suggestions that are measurable.

Was the student verbally conferenced about the feedback?

- ☐ No
☐ Yes

Student Signature: Student may add signature and comments by attaching a post-submission comment. To do so, student logs in using his/her user name and password. Then, go to Reports/Completed Evaluations. Select the evaluation template and hit apply; click View Details (looks like a folder at right of screen). Click on the plus sign (+) at the bottom next to Add Comment. Student will see a dropdown menu of all items on the evaluation; scroll down the list of items and select the Student Signature item.

☒ Enter

☐ Check to complete later, then click "Submit"

☒ Approved ☐ Not Approved

Competency Evaluation

Clinical Site:

Competency Evaluation Exam:

Student Name:

Competency Evaluation Exam:

Date:

Directions: This form is to be filled out by a radiologic technologist that has at least one year of active experience in Imaging. Technologists must fill out this form in its entirety or the competency will not be accepted. Students must have three proficiencies documented on their Master Checklist before they may attempt a competency unless otherwise approved by the clinical coordinator. During competency examinations, the entire procedure must be observed from the start of setting up the examination room to appropriately sending and completing the study. Supervising technologist may provide lifting assistance. Please be aware of the automatic fail criteria:

AUTOMATIC FAILURE CRITERIA: This criteria for the following questions is to be judged when the student is determined by the supervising technologist to be in the control area and ready to take the exposure.

The student attempted the wrong radiographic examination.

Fail Pass N/A

The student attempted the examination on the incorrect patient OR failed to properly identify the patient according to site protocol.

Fail Pass N/A

The student attempted to perform the study on the wrong side of the body.

Fail Pass N/A

The student had two or more marker errors (ex; no marker, marked wrong side). Note; if the marker is able to be visualized when the image mask is opened, this does NOT count as an error.

Fail Pass N/A

Student failed to ask about pregnancy status prior to exposure.

Fail Pass N/A

FACILITY / ROOM PREPARATION:

The student:

Inspects the radiographic room and cleans/straightens it before bringing the patient into the room for the exam.

No Yes N/A

Has all equipment and additional supplies (patient gown, shield, markers, etc.) available for convenient use before guiding the patient into the room.

No Yes N/A

Is able to manipulate all radiographic equipment smoothly, and centers the central ray appropriately prior to bringing the patient into the room.

No Yes N/A

Selects the proper tube to the proper source-to image receptor distance (SID) for each projection that is being performed.

No Yes N/A

Selects image receptor or collimate field of the appropriate sizes for each projection, based on the patient's size and examination (8x10, 10x12, 14x17) and then further collimates appropriately.

No Yes N/A

Identifies the patient on the work list or manually types the patient demographics into the system properly.

No Yes N/A

Selects appropriate anatomical programming, body region, specific body part, accurate view/projection for proper histogram analysis.

No Yes N/A

Double-checks preset parameters – Small, medium, large patient.

No Yes N/A

Selects appropriate Tube/Bucky/receptor combination (upright vs. table) or non-Bucky.

No Yes N/A

Utilizes density setting as needed.

No Yes N/A

Before escorting the patient in the room, the student sets an appropriate approximate technique based on the room and the examination being performed, including: kVp and mAs for a Manual technique OR selects the appropriate kVp and proper AEC cells if using AEC.

No Yes N/A

PATIENT PREPARATION:

The student:

Identifies the correct patient and examination, while the patient is in the examination room, using two or three forms of identification according to site protocol and verification of the requisition. (Full name, DOB, check wristband).

No Yes N/A

Introduces themselves to the patient and establishes a good rapport with the patient.

No Yes N/A

Checks the patient's script with the evaluator and correlates the patient's script with the requisition to ensure the proper order is to be completed if applicable.

No Yes N/A

Explains the examination in terms the patient is able to fully comprehend, and properly communicates with the patient throughout the examination from start to finish.

No Yes N/A

Removes all possible external artifacts prior to exposure.

No Yes N/A

Respects the patient's modesty and provides sufficient comfort for him or her during and after the examination. (Examples – providing a warm blanket, covering a patient with a sheet if they are lowering their pants down etc).

No Yes N/A

PATIENT POSITIONING: (Scoring for the following items should be based on the time in the student's training, for example an ambulatory chest radiographic exam for a first semester freshmen versus the same exam for a last semester senior)

PATIENT CARE

History

Unacceptable - Forgets or does not ask any history

Needs Improvement - Asks a brief history, forgets additional open ended questions, or does not document history in PACS or on requisition

Meets Expectation - Obtains adequate history before the examination and includes chief complaint, hx of surgeries on the part to be examined, etc. Then documents history appropriately for clinical site protocol

Exceeds Expectation - Obtains comprehensive history, documents, and recognizes need to correlate history and alter work flow or exam plan. For example, per site protocols, a expiration chest to detect pneumothorax

Unacceptable Needs Improvement Meets Expectation Exceeds Expectation N/A

PROCEDURE

Part Positioning

Unacceptable - Improper body part positioning.

Needs Improvement - Improvement needed

Meets Expectation - Acceptable body part positioning

Exceeds Expectation - Proficient body part centering.

Unacceptable Needs Improvement Meets Expectation Exceeds Expectation N/A

Part Centering

Unacceptable - Complete misalignment of the part to the image receptor.

Needs Improvement - The part was slightly off center.

Meets Expectation - Minimal amount of off centering.

Exceeds Expectation - Part of interest was exactly aligned to the middle of the image receptor.

Unacceptable Needs Improvement Meets Expectation Exceeds Expectation N/A

Central ray direction, including angles, entrance or exit points

Unacceptable - CR directed to the incorrect location.

Needs Improvement - Slight misalignment of CR to body part.

Meets Expectation - Acceptable CR centering to part.

Exceeds Expectation - Perfectly aligned to the designated entrance/exit point.

Unacceptable Needs Improvement Meets Expectation Exceeds Expectation N/A

Work flow performance in a logical manner

Unacceptable - Unaware of positioning protocol; no logical order used in the performance of the study.

Needs Improvement - Moved patient multiple times unnecessarily during the course of the study.

Meets Expectation - Generally used a logical approach in the most of the study. Competent for this time in training.

Exceeds Expectation - Optimal use of logic in completion of the study. There was no unnecessary movement of the patient.

Unacceptable Needs Improvement Meets Expectation Exceeds Expectation N/A

Equipment Handling / Detenting

Unacceptable - Unable to move or align equipment, attempts exposure with equipment out of alignment.

Needs Improvement - Slow to detent tube to bucky or center of grid, needs more practice.

Meets Expectation - Able to move equipment.

Exceeds Expectation - Proficient in handling equipment, swings and rotates tube easily, etc.

Unacceptable Needs Improvement Meets Expectation Exceeds Expectation N/A

IMAGE PRODUCTION

Exposure Index Number or S#

Unacceptable - Lacks knowledge of the exposure index number for that study.

Needs Improvement - Student needed prompting at an acceptable index range needed for that study.

Meets Expectation - Student is aware of the acceptable exposure index range for that image.

Exceeds Expectation - Student is aware of acceptable range for each projection and adjusts accordingly for next projections.

Unacceptable Needs Improvement Meets Expectation Exceeds Expectation N/A

SAFETY

Critical Thinking

Unacceptable - Unable to adapt to new situations.

Needs Improvement - Needs to practice critical thinking skills for this time in training

Meets Expectation - Exhibits the ability and attempts to acclimatize to new and difficult scenarios necessary; by using critical thinking and problem solving skills.

Exceeds Expectation - Student is entirely independent and efficient in new or difficulty scenario utilizing critical thinking (ex, trauma obliques, etc).

Unacceptable Needs Improvement Meets Expectation Exceeds Expectation N/A

IMPORTANT DETAILS:

The student:

Encourages confidence in the patient by displaying self-confidence throughout the examination.

No Yes N/A

Places a lead marker in the appropriate area of the cassette/receptor (top, bottom, anteriorly, posteriorly, laterally), where it will be visualized on the finished radiograph, on the proper anatomical side (right/left).

***NOTE: If the marker is located outside of the collimated field or burned out and the student is capable to utilize workstation/computer tools to unmask or post process the image and retrieve a visible marker, this DOES NOT count as a marker error.

No Yes N/A

Utilizes positioning sponges and other accessories when applicable to provide for increased patient care and better diagnostic images (Back scatter mat, weights, sand bags, IV poles, angle sponges etc.)

No Yes N/A

Adheres to ALARA standards by providing radiation protection (lead shield) for the patient, self, and others (closes doors).

No Yes N/A

Applies proper beam restriction and makes adjustments as necessary.

No Yes N/A

Exposes the cassette/IR after giving the patient proper instruction to hold still and after giving him or her proper breathing instructions for each projection (inspiration, expiration, suspended respiration, breathing technique).

No Yes N/A

Provides each radiograph with the proper identification and/or processes each cassette in the CR reader without difficulty.

No Yes N/A

Accurately flips, annotates, and post processes images properly per site protocol before sending images to PACS. (Annotating supine, prone, x-table lateral, post-op etc).

No Yes N/A

Properly completes the examination by filling out all necessary paperwork, entering the examination in the computer (Track, scan, verify), scans appropriate paperwork into PACS, and has the images checked by the appropriate staff members or evaluator and informing the patient that he or she is finished.

No Yes N/A

Acknowledges and understands constructive criticism and uses it to his or her advantage.

No Yes N/A

Leaves the radiographic room clean and tidy for the next examination to be performed. All supplies are put back properly in their original location.

No Yes N/A

Completes the examination within a logical time frame.

No Yes N/A

Washes hands post procedure or uses appropriate hand sanitizer to promote infection control.

No Yes N/A

RADIOGRAPHIC IMAGE CRITIQUE: Image critique is an essential teaching component allowing the students to recognize the need for improvement and plan for the next situation.

Student states the radiographs in this exam are Optimal, Sub-Optimal, or Repeatable.

No Yes N/A

Discusses exposure factors and is able to suggest plan for improvement.

No Yes N/A

Discusses image resolution.

No Yes N/A

Evaluates image for motion.

No Yes N/A

Identifies internal or external artifacts.

No Yes N/A

Identifies positioning and is able to suggest plan for improvement if applicable (all anatomy included, evidence of proper centering/alignment etc.)

No Yes N/A

Proper marker placement.

No Yes N/A

Identifies collimation and radiation protection practices used during radiographic exam.

No Yes N/A

Discusses image contrast.

No Yes N/A

ANATOMY IDENTIFICATION

Unsatisfactory - Student has difficulty in naming any pertinent radiographic anatomy.

Needs Improvement - The student had multiple errors in identifying radiographic anatomy.

Satisfactory - Student is able to identify most anatomy that the evaluator asked.

Outstanding - Student is able to completely identify ALL anatomy that evaluator asked.

Unsatisfactory Needs Improvement Satisfactory Outstanding

FINAL COMMENTS: (enter in field at right)

Enter

Student Comp Exam Signature: Student may add signature by attaching a post-submission comment. To do so, student logs in using his/her user name and password. Then, go to Reports/Skill Summary. Click on date of Comp which brings up results. Scroll to bottom and click plus sign (+) next to Add Comment. Select the Student signature item at the bottom of the dropdown and type signature in text box. Click Add to complete.
Enter

Check to complete later, then click "Submit"

Approved Not Approved

Grading:

<u>All Sections (10%)</u>	<u>Middle Section (80%)</u>	<u>Anatomy(10%)</u>
Yes: 100	Exceeds Expectations: 100	Outstanding: 100
No: 0	Meets Expectations: 85	Satisfactory: 85
	Needs Improvement: 65	Needs Improvement: 65
	Unacceptable: 0	Unsatisfactory: 0

Tech Factors - Student Input Only

Clinical Site:

Competency Evaluation Exam:

Student Name:

Competency Evaluation Exam:

Date:

Student has 3 Proficiencies?

No Yes

Patient's Age (enter in text field at right) _____

Patient Type/Difficulty Level

Patient A: Cooperative during the examination, follows directions, ambulatory, and/or able to move onto the radiographic table with small amounts of assistance.

Patient B: Presents with a few challenges linked to patient's ability to move, patient size, patient's ability to communicate, patient is not compliant with directions given, or the patient has difficulty cooperating.

Patient C: Unresponsive, a Trauma patient with multiple examinations ordered, pediatric patient six years of age or younger, or a very challenging patient in the eyes of the evaluator.

Patient A Patient B Patient C

PROJECTION 1: enter at right:

Technical Factors (AEC, Manual, kVp, mAs Readout) used for this projection (enter at right)

Exposure Index (EI) or S# for this projection (enter at right)

PROJECTION 2: enter at right:

Technical Factors (AEC, Manual, kVp, mAs Readout) used for this projection (enter at right)

Exposure Index (EI) or S# for this projection (enter at right)

PROJECTION 3: enter at right:

Technical Factors (AEC, Manual, kVp, mAs Readout) used for this projection (enter at right)

Exposure Index (EI) or S# for this projection (enter at right)

PROJECTION 4: enter at right:

Technical Factors (AEC, Manual, kVp, mAs Readout) used for this projection (enter at right)

Exposure Index (EI) or S# for this projection (enter at right)

PROJECTION 5: enter at right:

Technical Factors (AEC, Manual, kVp, mAs Readout) used for this projection (enter at right)

Exposure Index (EI) or S# for this projection (enter at right)

PROJECTION 6: enter at right:

Technical Factors (AEC, Manual, kVp, mAs Readout) used for this projection (enter at right)

Exposure Index (EI) or S# for this projection (enter at right)

Enter date of comp in text field at right_____

FULTON-MONTGOMERY COMMUNITY COLLEGE
Radiologic Technology Program
Failed Competency Policy
Corrective Measures for Clinical Competency Testing

Student Name: _____

Date: _____

Radiographic Procedure Requiring Remediation: _____

Synopsis

Students are required to satisfactorily complete competency testing. A minimum of three proficiencies must be passed before a competency assessment may be attempted. If a student attains grades below acceptable level of 85%, the measures below must be followed and completed before the student can be tested again.

1. Re-study radiographic position/procedure from the textbook and notes.
2. Review clinical experience facilities policies and procedures for this examination. This review should be clinical site specific where the failure occurred unless otherwise specified by clinical instructor/program faculty.
3. Begin by observing a licensed radiographer/clinical faculty performing this examination. Next, complete three more Proficiency/Performs under direct supervision of a technologist and document in Trajecsyst on daily log sheets and in the spaces below:

Proficiency 1 Technologist Signature: _____ Date: _____

Proficiency 2 Technologist Signature: _____ Date: _____

Proficiency 3 Technologist Signature: _____ Date: _____

4. Request conference with clinical faculty to review procedure requirements prior to re-testing.

I have completed steps 1-4 and I am ready to be re-tested for _____.

Radiographic Procedure

Yes No Student Signature: _____

Is the student ready for re-testing? If yes, the technologist completing the student signs below.

Yes No Clinical Faculty Signature: _____

Date: _____

Note: This corrective form, should be filed in the student e-folder. The failed competency evaluation and the passed competency evaluation after remediation will be housed in the student's Trajecsyst record.

Revised 9/06,6/11cc,8/14 kl, 9/18 kcb, 5/2021 kcb.

Critical Thinking Competency

Subject:

Site:

Critical Thinking Competency

Critical Thinking Competencies is based on a Successfully Completed Competency; please enter name of competency at right:

Demonstrates Radiation Protection for the Patient, Self and Others.

In this category to achieve maximum points students should be evaluated for:

- Shield placement
- Exposure Index
- Artifacts removed
- Patient Identification
- Check script
- Repeat exposures
- Possibility of pregnancy if appropriate
- Radiation safety for personnel (dosimeter and log for anyone who holds patients, students not

allowed to hold for radiographic exams)

- ☐ Unacceptable
- ☐ Needs Improvement
- ☐ Meets Expectation
- ☐ Exceeds Expectation
- ☐ N/A

Demonstrates Knowledge of Human A. and P. as well as Pathology with Relation to Examination Being Performed.

In this category to achieve maximum points students should be evaluated for:

- Department protocol knowledge
- Student selects the proper collimated field size and field orientation for the projections performed.
- Identifying pathology that could affect image and making necessary adjustments (example pneumothorax or crosswise versus lengthwise, sitting 90 degrees erect for AP chest exam, bladder shot for clipping symphysis instead of full re-centered repeat etc)

- ☐ Unacceptable
- ☐ Needs Improvement
- ☐ Meets Expectation
- ☐ Exceeds Expectation
- ☐ N/A

Demonstrates Competency in Digital Data Management.

In this category to achieve maximum points students should be evaluated for:

- Digital labeling
- Identify EI ranges
- PACS notes if applicable
- Identify accession numbers for correct patient, correct exam, and multiple exams
- Checks that images were sent timely to PACS and tracked
- Digital masking appropriately, not to crop exposed area
- Ability to access correct anatomic program for exam and adjust technical factors as necessary
- Knowledge of post processing and digital applications (flipping, ROI)
- ☐ Unacceptable
- ☐ Needs Improvement
- ☐ Meets Expectation
- ☐ Exceeds Expectation
- ☐ N/A

Displays Proper Body Mechanics.

In this category to achieve maximum points students should be evaluated for:

- Ability to ask for help when necessary (lifting, moving fracture, etc)
- Smooth physical work flow during exam
- Raises work surfaces such as table to waist height
- Detents smoothly
- Driving C-arm or portable
- Steering wheelchairs/ stretchers
- ☐ Unacceptable
- ☐ Needs Improvement
- ☐ Meets Expectation
- ☐ Exceeds Expectation
- ☐ N/A

Displays Confidence in Equipment Operation and Functionality.

In this category to achieve maximum points students should be evaluated for:

- Detent easily in various rooms
- Toggles through necessary computer steps/ menus to pull up correct patient, correct exam easily
- Ability to use imaging equipment accessories (sponges, grids, etc)
- Ease of using and manipulating all equipment for various radiographic exams (fluoroscopy, C-Arm, etc)
- Ability to maintain safe work environment (use of brakes, locks, evaluation of patient mobility)
- ☐ Unacceptable
- ☐ Needs Improvement
- ☐ Meets Expectation
- ☐ Exceeds Expectation

☐ N/A

Demonstrates Effective Positioning Skills.

In this category to achieve maximum points students should be evaluated for:

- Ability to center part to IR
- Ability to center CR to part
- Ability to best demonstrate anatomy for the clinical objective of the exam (obliquity, angle)
- Ability to demonstrate proper IR orientation
- Alignment of long axis of part with long axis of IR

- ☐ Unacceptable
- ☐ Needs Improvement
- ☐ Meets Expectation
- ☐ Exceeds Expectation
- ☐ N/A

Demonstrates Critical Thinking in Regards to Patient's Condition when Positioning for Examinations.

In this category to achieve maximum points students should be evaluated for:

- Ability to meet patients' needs as necessary
- Ability to adjust equipment and technical skills as necessary for optimal patient care (example: cross table lateral for trauma, trauma obliques)

- ☐ Unacceptable
- ☐ Needs Improvement
- ☐ Meets Expectation
- ☐ Exceeds Expectation
- ☐ N/A

Demonstrates Proper Exposure Techniques for Obtaining Diagnostic Quality Radiographs / Images.

In this category to achieve maximum points students should be evaluated for:

- Ability to select optimal technical factors following ALARA
- Ability to consistently target the middle or under exposed end of the suggested exposure range
- Ability to correct and adjust technical factors for subsequent images based on EI

- ☐ Unacceptable
- ☐ Needs Improvement
- ☐ Meets Expectation
- ☐ Exceeds Expectation
- ☐ N/A

Demonstrates Proper Patient Communication by Obtaining Full History.

In this category to achieve maximum points students should be evaluated for:

- Ability to communicate effectively with patients; gives directions
- Establishes rapport with patient
- Ability to ask pertinent history questions efficiently
- Ability to communicate with other health care team members

- ☐ Unacceptable
- ☐ Needs Improvement
- ☐ Meets Expectation
- ☐ Exceeds Expectation
- ☐ N/A

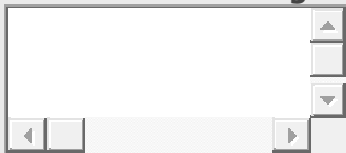
Image Critiques: (student can confidently discuss centering, image quality, make suggestions for improvements)

In this category to achieve maximum points students should be evaluated for:

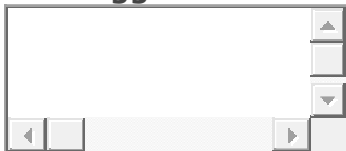
- Bring up images that were obtained during this exam (student can confidently discuss centering, image quality, make suggestions for improvements)
- Ability to create performance in regards to all the above categories during this graded radiographic examination
- Ability to state whether images are optimal, suboptimal, or repeatable
- Ability to offer suggestions for improvement

- ☐ Unacceptable
- ☐ Needs Improvement
- ☐ Meets Expectation
- ☐ Exceeds Expectation
- ☐ N/A

List Student Strengths Observed:



List Suggestions for Improvements:



Items below if marked "yes" result in automatic failure:

- Wrong patient OR failed to properly identify the patient according to site protocol

☐ Yes

☐ No

- Attempted wrong exam

☐ Yes

☐ No

- Attempted wrong side

☐ Yes

☐ No

- Marked incorrectly on two or more images

☐ Yes

☐ No

- Failed to ask about pregnancy status prior to exposure.

☐ Yes

☐ No

Student Signature: Student may add signature by attaching a post-submission comment. To do so, student logs in using his/her user name and password. Then, go to Reports/Completed Evaluations. Select the evaluation template and hit apply; click View Details (looks like a folder at right of screen). Click on the plus sign (+) at the bottom next to Add Comment. Student will see a dropdown menu of all items on the evaluation; scroll down the list of items and select the Student Signature item.

☒ Enter

☐ Check to complete later, then click "Submit"

☒ Approved ☐ Not Approved

Grading:

Exceeds Expectations: 100

Meets Expectations: 85

Needs Improvement: 65

Unacceptable: 0

Assessment of Professional Growth

Subject:

Site:

Assessment of Professional Growth

The goal of Clinical Experience education is to graduate professional individuals who conform to professional standards of conduct and have desirable employment characteristics. The function of this evaluation is to provide faculty a means of evaluating each student as he/she progresses toward the goal of an independent professional. Each section is weighted with a value of 0 – 3 as indicated:

Organization: Exhibits sound judgment in workflow

- ☐ Needs improvement, but does not recognize need for improvement
- ☐ Recognizes need for improvement and attempts to correct
- ☐ Work is consistently well done
- ☐ Meets high standards of accuracy and thoroughness

Quality of Work: Organized, thorough, neat, accurate

- ☐ Needs improvement, but does not recognize need for improvement
- ☐ Recognizes need for improvement and attempts to correct
- ☐ Work is consistently well done
- ☐ Meets high standards of accuracy and thoroughness

Time Management: Constructive and productive use of time

- ☐ Has difficulty using time efficiently
- ☐ Slow to initiate and complete work
- ☐ Productive, completes tasks in a timely manner
- ☐ Consistently efficient, highly productive

Communication: Ability to relate with patients

- ☐ Avoid communication
- ☐ Responds to direct requests only, needs improvement
- ☐ Aware of the patients needs, usually interacts well
- ☐ Superior ability to establish a rapport with patients

Interpersonal Relationships: Communication/interaction with hospital staff and peers

- ☐ Lack of or poor interaction with others
- ☐ Could be more considerate and tactful
- ☐ Gets along well with others
- ☐ Tactful, promotes good will, pleasant

Motivation: Willingness to work

- ☐ Avoids work
- ☐ Usually follows through when assigned tasks
- ☐ Self motivated, seeks assignments
- ☐ Seeks additional work and independent responsibilities

Situational Assessment / Critical Thinking: Reasoning and interpretation skills

- ☐ Somewhat illogical, frequent inaccurate or poor decisions
- ☐ Has limited ability to assess a given situation
- ☐ Uses sound reasoning in making decisions and reaching conclusions
- ☐ Takes control of situation, responds well under pressure

Professional Ethics: Patient rights, integrity, honesty, character, reaction to criticism

- ☐ Ignores rights of others, displays a negative attitude, frequently tardy or absent
- ☐ Attempts professional conduct, usually succeeding, sometimes tardy or absent, sloppy non-compliance with dress code
- ☐ Adheres to professional standards in acceptable manner, usually on time, usually in assigned area
- ☐ Demonstrates highest level of professional integrity, always on time, never absent, always in assigned area

Self-confidence: Trust in ones abilities

- ☐ Easily upset and unsure
- ☐ Sometimes unsure or unable to move forward when indicated
- ☐ Self-confident with reason
- ☐ Consistently self-confident, applies independent judgment

Retention of Knowledge

- ☐ Requires repeated explanations
- ☐ Requires some repetition of information
- ☐ Retains information well
- ☐ Consistently interprets and applies learned information

Comments:

Student Signature: Student may add signature and comments by attaching a post-submission comment. To do so, student logs in using his/her user name and password. Then, go to Reports/Completed Evaluations. Select the evaluation template and hit apply; click View Details (looks like a folder at right of screen). Click on the plus sign (+) at the bottom next to Add Comment. Student will see a dropdown menu of all items on the evaluation; scroll down the list of items and select the Student Signature item.

☒ Enter

☐ Check to complete later, then click "Submit"

☒ Approved ☐ Not Approved

Grading:

3: 100

2: 85

1: 65

0: 0



RADIOLOGIC TECHNOLOGY FINAL COMPETENCY GRADING SHEET

REPEAT RATE: _____

(Repeat rate should be demonstrated on analysis worksheet)

FINAL SCORE: _____ **(CALCULATE BY AVERAGING ALL EXAM SCORES TOGETHER)**

(Final score is a minimum of 6 scored exams averaged, for example on a slow day.

6-9 scored exams averaged is preferred when possible including fluoroscopy, trauma, low volume)

Student signature: _____

Printed name: _____

Faculty/Evaluator signature: _____

Date: _____

COMMENTS:

**FULTON-MONTGOMERY COMMUNITY COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM
FINAL COMPETENCY**

Student Name: _____

Final competencies will be based on, at least or minimum of six of the following procedures:

Preference is to complete all 9 and is at the discretion of the evaluator.

(Circle One) **Use one form for each exam and then fill out a cover sheet.**

Pass or fail utilizing the following criteria is at the discretion of the evaluator.

- | | |
|----------------------------|-------|
| 1. Trauma examination | _____ |
| 2. Portable examination | _____ |
| 3. Extremity examination | _____ |
| 4. Chest examination | _____ |
| 5. Spine examination | _____ |
| 6. Fluoroscopy examination | _____ |
| 7. Low volume examination | _____ |
| 8. Multiple examinations | _____ |
| 9. Pediatric examinations | _____ |

A grade of 85.0 or better is required to pass the Final Competencies

Scoring abbreviations:

U-UNACCEPTABLE

NI- NEEDS IMPROVEMENT

E- EXCELLENT

If any of the below categories are not applicable, cross out the section and do not include in score.

NOTE:

1. All mandatory and elective competencies must be completed before the Terminal Competencies can be taken.
2. Automatic Failures:
 - a. **Wrong patient OR failed to properly identify the patient according to site protocol.**
 - b. **Attempted wrong exam**
 - c. **Attempted wrong side**
 - e. **Marked incorrectly on two or more images/competencies**
 - f. **Failure to question female patients about pregnancy status prior to exposure.**

If you fail the Terminal Competency you can make it up with in one month. Depending on the scheduling of your initial attempt, additional clinical time may be mandated prior to second attempt.

3. Passing is a 85.0%.
4. You will be allowed a maximum of 15% for repeat films for the entire terminal competency day. This will be determined by the clinical instructor.

1.Demonstrate radiation protection for the patient, self, and others.

U	NI		E
1 2	3 4	5 6	7 8 9 10

2.Demonstrate knowledge of human anatomy and physiology as they relate to examination being performed; to include proper field sizes and orientations.

U	NI			E
1 2	3 4	5 6	7 8	9 10

3.Demonstrates ability to take an accurate history and correlate with examination being performed technically including potential pathologies.

U	NI			E
1 2	3 4	5 6	7 8	9 10

4.Displays proper body mechanics, (lifting patients, transporting) and to include workflow, exam sequencing, and time management.

U	NI			E
1 2	3 4	5 6	7 8	9 10

5.Displays confidence in equipment operation and functionality using safety guidelines.

U	NI			E
1 2	3 4	5 6	7 8	9 10

6.Demonstrates effective positioning skills and centering accuracy.

U	NI			E
1 2	3 4	5 6	7 8	9 10

7.Demonstrates critical thinking and problem-solving regarding patient's condition when performing examinations.

U	NI			E
1 2	3 4	5 6	7 8	9 10

8.Demonstrates proper exposure techniques for obtaining diagnostic quality radiographs/images including EI/DI range evaluation and adjustments if necessary.

U	NI			E
1 2	3 4	5 6	7 8	9 10

9.Demonstrates emergent patient care when needed including evaluating fall risk.

U	NI			E
1 2	3 4	5 6	7 8	9 10

10.Image analysis of all examinations performed including anatomy identification and corrective action plan if necessary. (decision making regarding optimal, suboptimal, repeatable)

U	NI			E
1 2	3 4	5 6	7 8	9 10

Points Earned/ Total Possible Points: ____/____

Final Score: _____%

Comments:

[illegible]

Evaluator's Signature: _____ Date: _____

Vfc 1-20-06, rev. 3/06, 9/06, 1/07, 3/07, 6/12cc, 8/14 kl, 5/17 kl, 2/3/2020, kcb 5/2021, kml 12/2021, kml/kcb 2024



FMCC RADIOLOGIC TECHNOLOGY
FINAL COMPETENCY
INDIVIDUAL REPEAT RATE ANALYSIS WORKSHEET
FORMULA:

Repeat Rate= $\frac{\text{Total Number of Repeats}}{\text{Total Images Taken}}$ X 100 = _____%

Example 3 repeats, 6 total images
 $3/6 \times 100 = 50\%$

Please **RECORD ALL EXAMS** Performed During Entire Day

Number of Repeats	Total Number of Images	List Each Exam/Notes

Number of Repeats	Total Number of Images	List Each Exam/Notes
Total Number of Repeats: (for day)	Total Number of Images: (for day)	Total Repeat Rate for Day:

Name: _____ Date: _____

FULTON-MONTGOMERY COMMUNITY COLLEGE
Radiologic Technology Program Clinical Experience
Image Critique Evaluation

Identify image as optimal, suboptimal, repeatable, and defend your choice as you discuss below
check points

Clinical Site Protocols	Yes	No	N/A
Identify the exam and if the routine views have been completed according to clinical site, and if more images are needed per clinical site protocol.			
Evaluate the radiographic request/scanned request and correlate clinical information with the radiographic examination.			
Demonstrate radiograph on the illuminator/display monitor oriented correctly			
Identify all radiographic projections			
Discuss equipment CR/DR, grid use			
Anatomy Demonstrated			
Explain anatomical structures demonstrated in each projection			
Positioning			
Identify landmarks, tube-part/image receptor alignment, central ray, and other positioning techniques			
Collimation/CR/ Radiation Protection			
Evaluate radiation protection measures used including collimation and shielding			
Identify if the image shows four sided collimation when applicable, and if the field size shows tight collimation.			
Is gonadal shielding evident and accurately positioned?			

Exposure	Yes	No	N/A
Discuss exposure factors as related to a quality diagnostic radiograph; including relevant information about exposure indices, (including manufacturer specifics)			
Was AEC used, If AEC was used, is there any radiopaque hardware or prosthetic devices positioned in the ionization chambers. If AEC was used, was the density control set to 0			
Is quantum mottle present on image? If so, what is the cause?			
Describe subject contrast and how you would change the kVp accordingly.			
Discuss exposure factors as related to a quality diagnostic radiograph; including relevant information about exposure indices			
Image Quality Factors			
Analyze image for improvements (each category). Make suggestions for improvement.			
Was the appropriate SID used for each projection?			
How was unwanted distortion reduced/eliminated to produce highest diagnostic quality image?			
Identify preventable artifacts on image versus internal artifacts?			
Markers			
Identify proper radiopaque marker placement in image, describe best placement within the collimated field, is marker superimposing anatomy?			

FULTON-MONTGOMERY COMMUNITY COLLEGE
Radiologic Technology Program Clinical Experience
Image Critique Documentation

1. Non-Bucky Extremity	Date:
Discussion:	
2. Bucky Extremity	Date:
Discussion:	
3. Abdomen	Date:
Discussion:	
4. Chest/Ribs	Date:
Discussion:	
5. Hip, Pelvis, Sacrum	Date:
Discussion:	

6. GI Tract	Date:
Discussion:	
7. Cervical Spine	Date:
Discussion:	
8. Lumbar Spine	Date:
Discussion:	
9. Skull, Sinuses, and Facial Bones	Date:
Discussion:	
10. Elective Such as Trauma	Date:
Discussion:	

Student Signature:_____ **Date:**_____

Instructor Signature:_____ **Date:**_____

Clinical Scheduling:

Normal clinical hours defined by the SUNY FMCC Radiologic Technology program and The Joint Review Committee on Education in Radiologic Technology (JRCERT) for students at clinical sites is Monday – Friday, 5:00am – 7:00pm. Usual clinical hours are eight hour rotations from 8:00am – 4:00pm. There are a few exceptions due to clinical site protocols. For example, students rotating through Ellis Hospital that are scheduled for the Portable rotation will be required to be at clinical from 6:00am – 2:00pm or designated rotation time. Another rotation possibility is an 11:00am – 7:00pm rotation to accommodate student interaction with low volume and trauma exams.

Per NYS/ Department of Health; Bureau of Environmental Radiation Protection

Part 89 of the Practice of Radiologic Technology Public Health Law, Section 89.5 Students. (f): “A sponsoring institution may assign students to clinical practice on evenings, nights, weekends or legal holidays, provided that such clinical assignments:

- (1) Shall be given only to students in the final six months of training;
- (2) Shall not exceed a total of 80 hours;
- (3) Shall not result in the student attending in excess of eight hours in a 24-hour period of combined classroom and clinical assignments; and,
- (4) Shall be based upon a written plan and adequately maintained records, which include the designation of a radiologic technologist to supervise each such assignment.”

Per the JRCERT Standards for an Accredited Educational Program in Radiography, Standard 4.4, during evenings and/or weekends:

“Programs must assure that clinical involvement for students is limited to not more than ten (10) hours per day. If the program utilizes evening and/or weekend assignments, these assignments must be equitable, and program total capacity must not be increased based on these assignments. Students may not be assigned to clinical settings on holidays that are observed by the sponsoring institution. Programs may permit students to make up clinical time during the term or scheduled breaks; however, appropriate supervision must be maintained. Program faculty need not be physically present; however, students must be able to contact program faculty during makeup assignments. The program must also assure that its liability insurance covers students during these makeup assignments.”

Trajecsys Calendar: Student clinical schedules will be posted through their Trajecsys Calendar feature. Student clinical schedules are posted and updated by the Clinical Coordinator.

The Clinical Coordinator oversees all student scheduling in conjunction with each clinical site’s protocols for student rotations. All efforts will be made to ensure equitable rotations through all primary and off sites for a student’s clinical placement.

Students are expected to be present on time for where they are scheduled. Student schedules and rotations are generally not flexible for personal reasons. Exceptions will be considered on a limited basis at the discretion of the clinical site and Clinical Coordinator. All possible changes need to be requested in advance via the Clinical Preceptor and Clinical Coordinator.

If a student does not request changes in advance, the student will be charged a bank day, and will be required to be make up clinical time.

Clinical Probation Contract
DATE:

Clinical Documentation – Clinical Snapshots/Clinical Feedback:

Proposal:

- 1.
- 2.
- 3.

Clinical Site Modifications if needed:

STUDENT CHECKLIST:

<u>ACTIVITY</u>	<u>COMPLETED (MARK WITH A CHECK)</u>
1.	
2.	
3.	
4.	
5.	

Summary:

Addendum/Updates:

Resolution (Required):

- 1.
- 2.

Evaluator's Signature: _____ Date: _____

Student's Signature: _____ Date: _____

Student's signature does not necessarily indicate agreement, but indicates the student has reviewed this record.

USE OTHER SIDE IF NECESSARY

Student Radiation Exposure Counseling Form

Student radiation exposure exceeded program recommendations regarding radiation dose limit.

Fulton-Montgomery Community College Radiologic Technology Program abides by the New York State Department of Health recommendations, which states that the whole body Total Effective Dose Equivalent (T.E.D.E.) for a given quarter for a student technologist should not exceed 120 mR.

If the student exposure totals or exceeds 120 mR/quarter, the RSO/Program Director must meet with the student, complete and maintain this counsel record.

Name of student _____ Date _____

Social Security # _____

- The Radiologic Technology Program wishes to inform you that according to the ICN Radiation Report for the month of _____, 20__ , the report reveals that you have received a dose of _____mR Deep; _____mR Eye; _____mR Shallow.
- The RSO/Program Director will review with the student the Radiation Protection Policy # 12.

Analysis of Dosimeter Reading

- Hospital or clinical site: _____
- Radiographic area assigned: _____
- Include separate documentation and detail possible reasons for exposure received: (List specific exams, dates room assignments, and other information that may have contributed to the exposure listed above, especially involvement with Fluoroscopy, portables, Or, and Angio/Special procedures.)
- Ways to prevent elevated exposure levels: (attach supporting documents)

I have discussed the above material with the RSO/Department Director and I will take every precaution necessary to keep my radiation exposure dosage to the lowest possible level.

Student Signature: _____ Date: _____

Signature of RSO/Program Director: _____ Date: _____

Evaluation of Guidelines for Exposures to Technologically Enhanced Naturally Occurring Radioactive Material

6 Organizations Concerned with Radiation Protection of the Public

INTRODUCTION

This chapter describes the important national and international organizations concerned with radiation protection of the public, including regulatory authorities in the United States and various national and international organizations that develop recommendations on radiation protection. In addition to a general discussion of the role of each organization in radiation protection of the public, the particular responsibilities for the development of standards for TENORM are emphasized. The standards for TENORM that have been developed by each organization are considered in more detail in [chapter 7](#), [chapter 8](#), [chapter 9](#) and [chapter 10](#).

The principal federal agencies with responsibilities for radiation protection of the public are the Environmental Protection Agency (EPA), the Nuclear Regulatory Commission, and the Department of Energy (DOE). Of these, only EPA and DOE may develop guidance or regulations for TENORM. State governments also have important responsibilities for radiation protection of the public, including the development of regulations for TENORM. Finally, the National Council on Radiation Protection and Measurements (NCRP) and the Health Physics Society are important national organizations that have developed recommendations on radiation protection, including recommendations applicable to TENORM.

The International Commission on Radiological Protection (ICRP) is the principal international organization concerned with radiation protection. ICRP is an organization similar to NCRP and also develops recommendations on radiation protection. Other important international organizations are the International Atomic Energy Agency (IAEA) and the Commission of the European Communities (CEC).

ENVIRONMENTAL PROTECTION AGENCY

EPA was created by Reorganization Plan No. 3 of 1970. Its mission is to protect public health and to safeguard the natural environment (the air, water, and land), on which life depends. Under the authority of several laws, EPA develops environmental standards for both radiologic and non-radiologic hazards.

The responsibilities of EPA for radiation protection of the public are varied and complex. They include the development of federal guidance on radiation protection of the public; standards for radioactivity in the environment under authority of the Atomic Energy Act; standards for radioactivity under various laws, such as the Safe Drinking Water Act and Clean Air Act, that are concerned primarily with non-radiologic hazards; and guidance and regulations for indoor radon.

Federal Guidance on Radiation Protection of the Public

Executive Order 10831 assigned to EPA the responsibility for developing guidance for all federal agencies in the formulation of radiation-protection standards. This responsibility had been assigned previously to the Federal Radiation Council (FRC). The existing federal guidance on radiation protection of the public (FRC 1961; 1960) and EPA's proposed revision of the federal guidance (EPA 1994d) are discussed in [chapter 7](#).

The federal guidance on radiation protection of the public presents basic, minimal requirements intended to ensure that reasonably consistent and adequately protective approaches are implemented by all federal agencies with regulatory responsibilities for radiation protection, especially the Nuclear Regulatory Commission and DOE. EPA is not authorized to enforce any provisions of the federal guidance, but all federal agencies are expected to comply with the guidance unless there are compelling reasons (such as specific statutory requirements) not to do so.

The federal guidance on radiation protection of the public is intended to apply to all controlled sources of exposure, including sources not associated with operations of the nuclear fuel cycle, but excluding indoor radon and beneficial medical exposures. Therefore, the federal guidance is intended to apply to all exposures of the public to TENORM, but not to naturally occurring radionuclides in their undisturbed state.

However, as indicated by the discussions in this chapter and in [chapter 7](#) and [chapter 9](#), neither EPA nor any other federal agency with responsibilities for radiation protection of the public has developed standards that apply to all exposure situations involving TENORM. Rather, federal regulation of TENORM is rather fragmentary, and many potentially important sources of public exposure to TENORM are not regulated by any federal agency.

Environmental Radiation Standards Developed Under Atomic Energy Act

Under authority of the Atomic Energy Act, EPA is responsible for developing generally applicable environmental radiation standards for specific sources or practices associated with the nuclear fuel cycle that also are regulated by the Nuclear Regulatory Commission or DOE under the act (see later in this chapter). EPA has developed environmental standards under the Atomic Energy Act for operations of uranium fuel-cycle facilities, uranium and thorium mill tailings, and management and disposal of spent nuclear fuel, high-level waste, and transuranic waste; and it is considering the development of standards for management and disposal of low-level waste and cleanup of radioactively contaminated sites (see [chapter 7](#)).

Environmental radiation standards developed by EPA under the Atomic Energy Act do not apply to TENORM, because such materials are not defined in the act. Therefore, any environmental standard for TENORM developed by EPA must be authorized under some other law, as discussed in the next section.

An important feature of EPA's authority to establish environmental radiation standards for specific sources or practices under the Atomic Energy Act is that EPA usually is not the enforcement authority for these standards. Rather, they are enforced by the Nuclear Regulatory Commission or DOE in nearly all cases. This division of standard-setting and enforcement authorities between the EPA and the Nuclear Regulatory Commission or DOE is based on provisions of the Atomic Energy Act, which antedated the formation of EPA and assigned to the Atomic Energy Commission (AEC), a forerunner of the Nuclear Regulatory Commission, the responsibility for protecting public health and safety in the use of source, special nuclear, and byproduct materials arising from operations of the nuclear fuel cycle.

Environmental Radiation Standards Developed Under Other Laws

Under the authority of several laws other than the Atomic Energy Act, EPA is responsible for developing environmental standards for radionuclides and other nonradiologic hazards. In contrast with the standards developed by EPA under the Atomic Energy Act and discussed above, EPA also is the enforcement authority for its environmental standards developed under any other laws. The most important laws and their applicability to radionuclides associated with the nuclear fuel cycle and to TENORM are summarized as follows (the particular standards for radionuclides are discussed in more detail in [chapter 7](#)).

First, under authority of the Clean Air Act, EPA has established standards for airborne emissions of radionuclides from nuclear fuel-cycle facilities (that is, standards for airborne emissions of source, special nuclear, and byproduct materials which also are regulated under the Atomic Energy Act) and for particular airborne emissions of TENORM.

Second, under authority of the Clean Water Act, EPA may establish standards for release of naturally occurring and accelerator-produced radioactive materials (NARM), which include TENORM, to surface waters; such standards have been established for release of naturally occurring radionuclides from particular mines and mills. Source, special nuclear, and byproduct materials regulated under the Atomic Energy Act are excluded from regulation under the Clean Water Act, except that discharges of high-level waste into surface waters are banned.

Third, under authority of the Safe Drinking Water Act, EPA has established standards for naturally occurring and human-made radionuclides in public drinking-water supplies. For most public drinking-water supplies currently regulated under the Safe Drinking Water Act, exposures to naturally occurring radionuclides are the primary concern.

Fourth, under authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which addresses environmental releases of hazardous substances that are not adequately regulated under other environmental laws, EPA has established regulations that define a process for selecting remedial actions, including the development of goals for cleanup of contaminated sites. The remediation process and goals for cleanup apply to sites contaminated with source, special nuclear, or byproduct materials or with NARM.

In addition, EPA may establish environmental standards for TENORM under the Toxic Substances Control Act (TSCA), which is concerned with protection of human health and the environment in the use of toxic substances in commerce, and the Resource Conservation and Recovery Act (RCRA), which is concerned in part with management and disposal of hazardous and nonhazardous solid waste. Particularly under TSCA, EPA could develop environmental standards for TENORM that apply to all aspects of management and disposal of these materials. However, EPA has not yet established standards for TENORM under either of these laws.

In summary, EPA is authorized to establish and enforce standards for radionuclides in the environment under several laws that are intended primarily to address nonradiologic hazards. In regard to TENORM, EPA has established standards for some airborne releases under the Clean Air Act, some releases to surface waters under the Clean Water Act, concentrations in public drinking-water supplies under the Safe Drinking Water Act, and cleanup of contaminated sites under CERCLA. EPA also may establish standards for TENORM under TSCA or RCRA, but it has not yet done so.

Thus, public exposures to TENORM are regulated by EPA only in a rather fragmentary manner under a variety of environmental laws, and no EPA regulation or set of regulations applies to all exposure situations involving TENORM. Such regulations could be developed under TSCA.

NUCLEAR REGULATORY COMMISSION

The Nuclear Regulatory Commission is an independent regulatory authority created by the Energy Reorganization Act of 1974, which amended the Atomic Energy Act by replacing AEC with the Nuclear Regulatory Commission and a separate agency called the Energy Research and Development Administration (ERDA), which later became part of DOE. The Energy Reorganization Act assigned to the Nuclear Regulatory Commission the previous responsibilities of AEC for protection of public health and safety in the use of source, special nuclear, and byproduct materials as defined in the Atomic Energy Act. Those responsibilities are carried out by means of the Nuclear Regulatory Commission's authority to license all commercial activities involving the use of these radioactive materials. The Nuclear Regulatory Commission also was given licensing authority over some facilities operated by DOE and other federal agencies.

In its role as an enforcement authority for environmental radiation standards established by EPA under the Atomic Energy Act, the Nuclear Regulatory Commission enforces any such standards that apply to licensed commercial activities, as well as the standards that apply to particular DOE activities.

The Nuclear Regulatory Commission derives all its regulatory authority from the Atomic Energy Act. Therefore, it has no regulatory authority over TENORM as defined in this study, because these materials do not arise from operations of the nuclear fuel cycle and are not defined in the act.

DEPARTMENT OF ENERGY

DOE was created by the Department of Energy Organization Act of 1977, which amended the Atomic Energy Act by combining ERDA, which had been created by the Energy Reorganization Act of 1974, with parts of other federal agencies. DOE is responsible for all atomic-energy defense activities and other activities involving energy research, development, and demonstration; it also is assigned the responsibility for protecting public health and safety in carrying out its authorized activities.

As noted above, DOE is an enforcement authority for environmental radiation standards established by EPA under the Atomic Energy Act. Specifically, DOE enforces any such standards that apply to activities of DOE or its contractors, with the exception of some activities for which EPA or the Nuclear Regulatory Commission is the enforcement authority.

As in the case of the Nuclear Regulatory Commission discussed in the previous section, the authority for all DOE activities derives from the Atomic Energy Act. However, unlike the Nuclear Regulatory Commission, DOE also has regulatory authority over any NARM and thus TENORM. That is its responsibility because DOE is required under the act to protect public health and safety in carrying out its authorized activities and EPA has not yet established environmental standards for NARM under TSCA. Current DOE requirements for management and disposal of TENORM contained in DOE Order 5400.5 (DOE 1990)

STATE GOVERNMENTS Example: (NYS/DOH BERP)

State governments have two important responsibilities for radiation protection of the public. First, the so-called agreement-state provisions of the Atomic Energy Act specify that the Nuclear Regulatory Commission may transfer to the states portions of its licensing authority over commercial uses of source, special nuclear, and byproduct materials. This state licensing authority does not apply to any other radioactive materials (such as TENORM) or to any DOE activities licensed by the Nuclear Regulatory Commission.

Second, in the absence of federal legislation and EPA regulations that address all exposure situations involving NARM and thus TENORM in the environment, these materials are subject to regulation only by the states, except for the fragmentary regulation of some sources and practices by EPA under a variety of environmental laws and the responsibilities of DOE for regulating these materials under its control. The authority for states to regulate NARM is based on the point of Constitutional law that any responsibilities for protection of public health and safety not specifically assigned to the federal government are delegated to the states.

Some states consider that TENORM is regulated under their general rules on radiation protection. However, as discussed in [chapter 9](#), several states have developed regulations specifically for TENORM, and the Conference of Radiation Control Program Directors (CRCPD) has developed suggested state regulations for TENORM (CRCPD 1997) that are intended to provide guidance to the states in developing their own standards. The suggested state regulations have not been issued in final form, and they have not been implemented by any states.

NATIONAL COUNCIL ON RADIATION PROTECTION AND MEASUREMENTS

NCRP is a nonprofit corporation chartered by Congress in 1964 that, in addition to other authorized activities, develops recommendations on radiation protection. It is the successor organization to an unincorporated association of scientists called the National Committee on Radiation Protection and Measurements, which began as the Advisory Committee on X-ray and Radium Protection in 1929 and was reorganized as the National Committee on Radiation Protection in 1946.

NCRP is an advisory organization, and it has no authority to establish or enforce any requirements for radiation protection. However, its recommendations have been influential in the development of standards and guidances for radiation protection in the United States, initially by FRC, AEC, and the Public Health Service and later by the Nuclear Regulatory Commission, DOE, and EPA.

NCRP has issued many reports addressing NORM and TENORM (NCRP 1993b; 1993a; 1989a; 1988; 1987a; 1984c; 1984b). Current NCRP recommendations for control of exposures of the public to indoor radon and other NORM are discussed in [chapter 8](#) and [chapter 9](#).

HEALTH PHYSICS SOCIETY

The Health Physics Society was formed in 1956 as a scientific organization concerned with protection of people and the environment from radiation. The society's membership includes professionals representative of all scientific and technical fields related to radiation protection and drawn from academe, government, medical institutions, research laboratories, and industry, both nationally and internationally. The society is chartered in the United States as a nonprofit scientific organization and is not affiliated with any government or industrial organization.

As a scientific organization, the Health Physics Society has no particular responsibilities for developing radiation-protection standards or recommendations. In recent years, however, the society's Scientific and Public Issues Committee has issued several position statements on policy matters of interest to radiation protection in response to opportunities to provide public comment. The position statement on standards for site cleanup and restoration and its relevance to regulation of TENORM are discussed in [chapter 9](#).

INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION

ICRP was established in 1928 as the International X-ray and Radium Protection Committee and was restructured under its present name in 1950. It is an association of scientists from many countries, including the United States, that develops recommendations on all aspects of radiation protection. ICRP has official relationships with the World Health Organization and IAEA, and it has important relationships with other national and international organizations concerned with radiation protection, including NCRP.

Like NCRP, ICRP is an advisory organization with no authority to establish or enforce any requirements for radiation protection. However, its recommendations have greatly influenced the development of radiation-protection standards in many nations, including the United States.

ICRP has issued several reports addressing radon and occupational exposure to naturally occurring radionuclides in mines (ICRP 1993b; 1987b; 1986; 1981). Current ICRP recommendations for control of exposures of the public to indoor radon and other NORM are discussed in [chapter 8](#) and [chapter 9](#).

INTERNATIONAL ATOMIC ENERGY AGENCY

IAEA is an intergovernmental organization established in 1957 under the auspices of the United Nations. It provides a forum for scientific and technical cooperation in nuclear activities, and it is the international inspectorate for the application of nuclear safeguards and verification measures covering nondefense nuclear programs.

One of IAEA's statutory objectives is to establish radiation-protection standards. Its current requirements for radiation protection, which essentially incorporate current ICRP recommendations (ICRP 1993b; 1991), are contained in the Basic Safety Standards (IAEA 1996a); these are intended to set forth requirements for member states, including the United States. However, the member states, not IAEA, are responsible for enforcing the standards. The Basic Safety Standards have not had any influence on the development of radiation standards in the United States beyond the influence of the ICRP recommendations that have provided the basis for the standards.

The Basic Safety Standards include provisions that apply to indoor radon and other naturally occurring radionuclides.

REFERENCE Source: <https://www.ncbi.nlm.nih.gov/books/NBK230640/>

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IN STATE TUITION RATES AND FEES - 2024/2025

Fall 2024 - Winter 2025 - Spring 2025 - Summer 2025

# of CREDITS	RATE** per Credit	TOTAL per Credit	Student Activity Fee	Technology Fee	Course Material Book Fee	Wellness Fee	Parking Fee	TOTAL
1	230.00	230.00	12.00	23.00	26.00	0.00	0.00	291.00
2	230.00	460.00	24.00	46.00	52.00	0.00	0.00	582.00
3	230.00	690.00	36.00	69.00	78.00	0.00	0.00	873.00
4	230.00	920.00	48.00	92.00	104.00	0.00	0.00	1,164.00
5	230.00	1,150.00	60.00	115.00	130.00	0.00	0.00	1,455.00
6	230.00	1,380.00	72.00	138.00	156.00	0.00	0.00	1,746.00
7	230.00	1,610.00	84.00	161.00	182.00	20.00	0.00	2,057.00
8	230.00	1,840.00	96.00	184.00	208.00	20.00	0.00	2,348.00
9	230.00	2,070.00	108.00	207.00	234.00	20.00	0.00	2,639.00
10	230.00	2,300.00	120.00	230.00	260.00	20.00	0.00	2,930.00
11	230.00	2,530.00	132.00	253.00	286.00	20.00	0.00	3,221.00

Full Time Charges for Fall and Spring (NOT Winter or Summer)

12	NY Res. w/o C/R	5,520.00	145.00	276.00	312.00	20.00	0.00	6,273.00
12	NY Res. & Non-NY [†]	2,760.00	145.00	276.00	312.00	20.00	0.00	3,513.00

College-in-the-highschool (CHS), PTECH, and Early College HS students = \$77 per credit hour ~ \$924 FT per semester

**Rate is for NY Residents; for NY without CR = \$460 per credit hour + fees

[†]All Non-NYS Residents are also charged a \$150/semester or \$10/credit hour Capital Chargeback Fee

SUMMER CHARGES (12 credits +):

# of CREDITS	RATE** per Credit	TOTAL per Credit	Student Activity Fee	Technology Fee	Course Material Book Fee	Wellness Fee	Parking Fee	TOTAL
						(New Students Only)		
12	230.00	2,760.00	NONE - Summer	276.00	312.00	20.00	0.00	3,368.00
13	230.00	2,990.00	NONE - Summer	276.00	338.00	20.00	0.00	3,624.00
14	230.00	3,220.00	NONE - Summer	276.00	350.00	20.00	0.00	3,866.00
15	230.00	3,450.00	NONE - Summer	276.00	375.00	20.00	0.00	4,121.00
16	230.00	3,680.00	NONE - Summer	276.00	400.00	20.00	0.00	4,376.00
17	230.00	3,910.00	NONE - Summer	276.00	425.00	20.00	0.00	4,631.00
18	230.00	4,140.00	NONE - Summer	276.00	450.00	20.00	0.00	4,886.00
19	230.00	4,370.00	NONE - Summer	276.00	475.00	20.00	0.00	5,141.00
20	230.00	4,600.00	NONE - Summer	276.00	500.00	20.00	0.00	5,396.00

Technology Fee: Technology Fee supports development, implementation, and access to campus-wide facilities and services.

Course Fees: \$75.00 per course, assessed for courses that offer various labs, special equipment and/or support services.

Course Material Fee Program (books): \$26 Per Credit Hour - Per Class

Nursing/RAD Tech: Testing/Remediation \$290 per semester ~ Nursing IV Materials Fee \$525 ~ RAD Tech Clinical \$150

FM Transit Pass: \$350 per semester

Updated May 20th 2024 - JMD



MISA: Medical Imaging Student Association

The student Radiologic Technology club or MISA (Medical Imaging Student Association) organized in 2006 to serve the mission of FMCC and the Radiologic Technology Program. All student clubs are part of FMCC's Student Senate Association (SSA). Each semester the club participates in service to the college, service to the community, and a fundraiser.

In prior years, the senior students have held a pizza party for the incoming freshman as an information session and orientation to the Radiologic Technology program at FMCC. The club has held symposiums, and has raised money to attend conferences for organizations that are relevant to the Radiologic Sciences. Some of these events include the annual New York State Society of Radiologic Sciences (NYSSRS) conference and the American Society of Radiologic Technologists (ASRT) conference. At these seminars, students attend lectures by guest speakers and participate in activities with other Radiologic Technology programs including quiz bowls, poster competitions, and essay competitions.

Lambda Nu National Honor Society Chi Phi Chapter

Students also have the option to join the Lambda Nu National Radiology Honor Society New York Chi Phi Chapter. To join this prestigious honor society, student radiographers need to meet the following requirements:

- Pay the membership fee, cost is available on Lambda Nu's website: <https://lambdanu.org/>
- Obtain a 3.4 GPA for Radiologic Technology specific courses.
- Be a MISA member in good standing.
- Active membership of a Professional Society evidenced by: attending a conference, participation in a poster competition or essay competition, be a presenter at a function, become a member of a quiz bowl team.

