



## **MRT STUDENT HANDBOOK 2023 – 2024 ACADEMIC YEAR**



The MRT Student Handbook provides program-specific policies and procedures. All State Tech policies and procedures are located in the [State Tech Policy Library](#).

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## MRT PROGRAM ACADEMIC CALENDAR 2023-2025

FALL SEMESTER	2023-2024	2024-2025
Power Up / Program Orientation	August 21, 2023	August 19, 2024
Fall Semester Begins	August 22	August 20
Labor Day / College Closed	September 4	September 2
Professional Development / No Classes / <i>Clinical in Session</i>	September 5	September 3
1 <sup>st</sup> Year Clinicals Begin	September 19	September 17
End of 1 <sup>st</sup> 8 weeks	October 12	October 10
Advisory Council / No Classes / <i>Clinical in Session</i>	October 13	October 11
Beginning of 2 <sup>nd</sup> 8 weeks	October 16	October 14
Thanksgiving Break / College Closed	November 22-24	November 27-29
Final Exams	December 11-14	December 9-12
Fall Semester Ends	December 14	December 12
SPRING SEMESTER		
Spring Semester Begins	January 4, 2024	January 9, 2025
Martin Luther King Day / College Closed	January 15	January 20
Professional Development / No Classes / <i>Clinical in Session</i>	January 16	January 21
Presidents' Day / College Closed	February 19	February 17
End of 1 <sup>st</sup> 8 weeks	February 29	March 6
Advisory Council / No Classes / <i>Clinical in Session</i>	March 1	March 7
Spring Break / College Closed	March 4-8	March 10-14
Beginning of 2 <sup>nd</sup> 8 weeks	March 11	March 17
MoSRT Annual Conference ( <i>all students attend</i> )	April 3-5	TBA
SkillsUSA Contest / No Classes	April 4-5	April 10-11
Free Days / College Closed	March 28-29	April 17-18
Final Exams	May 6-9	May 12-15
Spring Semester Ends	May 9	May 15
Commencement	May 11	May 17
SUMMER SEMESTER		
Extended Summer Semester Begins*	May 13, 2024	May 19, 2025
Summer Clinicals Begin	May 20	May 27
Regular Summer Semester Begins*	June 3	June 2
Independence Day / College Closed	July 4-5	July 4
Regular Summer Semester Ends*	July 26	July 25
Extended Summer Semester Ends*	August 9	August 8

*The MRT program calendar is adapted from the State Tech Academic Calendar, approved January 20, 2023, by the State Technical College of Missouri Board of Regents.*

*\*Some programs have alternate begin and end dates in the summer. Students will receive course and clinical schedules from program faculty.*

## **PROGRAM ACCREDITATION**

This program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). The JRCERT is the only organization recognized by the U.S. Department of Education and Council for Higher Education Accreditation to accredit educational programs in radiography. Program accreditation supports excellence in education and ensures graduates are provided with the knowledge, skills, and values required to competently perform professional responsibilities. Consequently, the quality and safety of patient care is elevated.

The JRCERT can be contacted at:

20 N. Wacker Drive, Suite 2850

Chicago, IL 60606-3182

312-704-5300

[www.jrcert.org](http://www.jrcert.org)

## **MISSION STATEMENT**

The mission of the Medical Radiologic Technology program is to prepare graduates for a career in the healthcare industry as a radiologic technologist.

## **STATEMENT OF PHILOSOPHY**

This We Believe:

- All patients deserve quality care.
- Students deserve quality education.
- Radiography students are adults; they should behave as such, and be treated as adults.
- Competency-based education affords students the opportunity to acquire clinical skills while providing optimum patient care.
- Radiography education is a continual process, empowering students and technologists with enhanced knowledge and abilities.
- All persons deserve equal opportunity and care, regardless of age, gender, race or disability.

## PROGRAM GOALS

*Goal #1: Provide the opportunity for students to develop critical thinking and problem-solving skills.*

- Student Learning Outcomes:
  - Students will adapt radiographic exams according to patient needs and conditions.
  - Students will use problem solving skills in the clinical setting.

*Goal #2: Provide the opportunity for students to develop communication skills required for direct patient care.*

- Student Learning Outcomes:
  - Students will demonstrate effective oral communication skills.
  - Students will demonstrate effective written communication skills.

*Goal #3: Provide the opportunity for students to develop entry-level technical skills in radiologic technology.*

- Student Learning Outcomes:
  - Students and graduates will demonstrate technical skills necessary to assume a position as a radiologic technologist.
  - Students will follow current radiation protection protocols.

*Goal #4: Provide the opportunity for students to develop basic abilities, employability skills, and an appreciation for lifelong learning.*

- Student Learning Outcomes:
  - Students will understand the importance of job readiness and work ethics.
  - Graduates will demonstrate employability skills desired in a radiologic technologist.

*Goal #5: Provide the opportunity for students to develop knowledge required to take the National Certification Examination administered by the American Registry of Radiologic Technologists*

- Student Learning Outcomes:
  - Graduates will pass the ARRT certification exam on the 1<sup>st</sup> attempt.

## MRT PROGRAM FACULTY

**Melissa Hart, MHA, R.T. (R)(M), Program Director and Instructor**, has been in the field of radiologic technology since 2004, when she graduated with a Bachelor's Degree in Radiography from Missouri State University in Springfield. After becoming a Registered Radiologic Technologist, Mrs. Hart worked in the medical imaging departments at Cox Health in Springfield, Missouri and Audrain Medical Center in Mexico, Missouri. In 2005, Mrs. Hart specialized into mammography and began working as a Mammography Specialist at the Harris Breast Center (Boone Hospital) in Columbia, Missouri. In 2011, Mrs. Hart received her Master's Degree in Health Administration from the University of Missouri – Columbia. In July 2013, she was hired by State Tech as the Department Chair for the Medical Radiologic Technology Program. Mrs. Hart has a teaching certificate from the Missouri State Board of Education and is approved by the Joint Review Committee on Education in Radiologic Technology to teach at State Tech.

**Contact information:**

Office: 573.897.5343

[melissa.hart@statetechmo.edu](mailto:melissa.hart@statetechmo.edu)

**Vicki Johnson, M.Ed., R.T. (R) Clinical Coordinator and Instructor**, has been in the field of radiologic technology since 1995 when she graduated with a Bachelor's Degree from the University of Missouri – Columbia. Upon becoming a Registered Radiologic Technologist, Ms. Johnson worked in the Radiology Department at Boone Hospital in Columbia, Missouri. In 1999, Ms. Johnson became a classroom instructor for the Radiologic Technology Program at Nichols Career Center. She earned her Master's Degree in Education, with an emphasis in Career and Technical Education, in 2006 from the University of Missouri – Columbia. She taught at Nichols Career Center for fourteen years and served as the Clinical Coordinator of the Radiologic Technology Program for the summer of 2012. She was hired as the State Technical College of Missouri Medical Radiologic Technology Program's Clinical Coordinator in August of 2013. She holds a current teaching certificate from the Missouri State Board of Education and is approved by the Joint Review Committee on Education in Radiologic Technology to teach at State Tech.

**Contact information:**

Office: 573.897.5344

[vicki.johnson@statetechmo.edu](mailto:vicki.johnson@statetechmo.edu)



## SAMPLE COURSE OF STUDY

<u>1<sup>st</sup> Fall Semester</u>		<u>17 hours</u>
BIO 120	Human Anatomy and Physiology w/Lab I	4
MRT 101	Introduction to Healthcare & Radiologic Technology	1
MRT 105	Patient Care and Education	2
MRT 110	Radiation Protection	2
MRT 121	Medical Terminology I	2
MRT 130	Radiographic Procedures with Lab I	4
MRT 140	Clinical Education I	2
<u>1<sup>st</sup> Spring Semester</u>		<u>14 hours</u>
BIO 125	Human Anatomy and Physiology w/Lab II	4
MRT 126	Medical Terminology II	2
MRT 150	Radiation Exposures with Lab I	2
MRT 160	Radiographic Procedures with Lab II	4
MRT 170	Clinical Education II	2
<u>Summer Semester</u>		<u>12 hours</u>
CPP 101	Intro to Microcomputer Usage	3
MRT 155	Radiation Exposures with Lab II	2
MRT 180	Sectional Anatomy	2
MRT 190	Radiographic Procedures with Lab III	3
MRT 200	Clinical Education III	2
<u>2<sup>nd</sup> Fall Semester</u>		<u>15 hours</u>
COM 111	Oral Communications	3
COM 125	Job Search Strategies	1
MRT 210	Radiation Physics	2
MRT 221	Digital Imaging and Quality Assurance	3
MRT 231	Radiographic Procedures with Lab IV	3
MRT 240	Clinical Education IV	3
<u>2<sup>nd</sup> Spring Semester</u>		<u>14 hours</u>
MRT 251	Radiographic Pathology	2
MRT 260	Radiobiology	2
MRT 270	Radiographic Procedures with Lab V	2
MRT 281	Curriculum Review	2
MRT 290	Clinical Education V	3
Social Science	General Education Requirement	3

Refer to the [College Catalog](#) for a complete description of the core curriculum and general education requirements.

**TEXTBOOK & SUPPLY LIST (MRT courses only. See Bookstore for all other courses)**

Semester	Course	Textbook / Kit	Author	Edition	Publisher	ISBN
1 <sup>st</sup> Fall Semester	MRT 101	Introduction to Radiologic & Imaging Sciences & Patient Care	Adler, Carlton, & Stewart	8 <sup>th</sup>	Elsevier	9780323872201
	MRT 105	Same as MRT 101 Patient Care Kit – <i>purchase at Bookstore</i>	-	-	-	-
	MRT 110	Radiation Protection in Medical Radiography <ul style="list-style-type: none"> <li>• Textbook and Workbook</li> <li>• Workbook must be purchased <b>NEW</b></li> </ul>	Sherer, et. al.	9 <sup>th</sup>	Elsevier	9780323825030 9780323825115
	MRT 121	The Language of Medicine - must purchase <b>NEW</b>	Chabner	12 <sup>th</sup>	Elsevier	9780323551472
	MRT 130	Merrill’s Atlas of Radiographic Positioning & Procedures – 3 volume set  Workbook for Merrill’s Atlas – must purchase <b>NEW</b>	Long, Rollins & Smith	15 <sup>th</sup>	Elsevier	9780323832793 9780323832847
	MRT 140	Clinical Supply Kit – <i>purchase at Bookstore</i>	-	-	-	-
1 <sup>st</sup> Spring Semester	MRT 126	Same as MRT 121	-	-	-	-
	MRT 150	Radiologic Science for Technologists <ul style="list-style-type: none"> <li>• Textbook and Workbook</li> <li>• Workbook must be purchased <b>NEW</b></li> </ul>	Bushong	12 <sup>th</sup>	Elsevier	9780323661348 9780323709736
		Radiographic Imaging & Exposure	Fauber	6 <sup>th</sup>		9780323661393
	MRT 160	Same as MRT 130	-	-	-	-
MRT 170	Clinical – no textbook	-	-	-	-	
Summer Semester	MRT 155	Same as MRT 150	-	-	-	-
	MRT 180	Sectional Anatomy for Imaging Professionals <ul style="list-style-type: none"> <li>• Textbook and Workbook</li> <li>• Workbook must be purchased <b>NEW</b></li> </ul>	Kelley	4 <sup>th</sup>	Elsevier	9780323414876 9780323569613
	MRT 190	Same as MRT 130	Saia  Saia	12 <sup>th</sup>	McGraw Hill	9781260460445 9781259863578
		Lange Q&A Radiography Examination  Radiography Prep		9 <sup>th</sup>		
MRT 200	Clinical – no textbook	-	-	-	-	
2 <sup>nd</sup> Fall Semester	MRT 210	Same as MRT 150	-	-	-	-
	MRT 221	Digital Radiography & PACS	Carter/Veale	4 <sup>th</sup>	Elsevier	9780323826983
	MRT 231	Same as MRT 130	-	-	-	-
	MRT 240	Clinical – no textbook	-	-	-	-
2 <sup>nd</sup> Spring Semester	MRT 251	Comprehensive Radiographic Pathology	Eisenberg	7 <sup>th</sup>	Elsevier	9780323566704
	MRT 260	Same as MRT 110	-	-	-	-
	MRT 270	Same as MRT 130 Venipuncture Kit – <i>purchase at Bookstore</i>	-	-	-	-

## ORGANIZATION OF THE MRT PROGRAM

First year students attend classes 3 days a week and clinical rotations 2 days a week. Second year students attend classes 2 days a week and clinical rotations 3 days a week. Clinical shifts are set according to location and include day and evening shifts. Shifts begin as early as 7:30 a.m. and end as late as 9:00 p.m., with no shift being longer than 8 hours. Classroom hours will vary from semester to semester. The combined clinical and classroom hours will not exceed 40 hours per week. All health physical, drug screen, immunization, and criminal background check requirements must be met before any student can participate in clinical rotations. Students will be provided with a clinical schedule prior to their first clinical rotation and for all subsequent clinical rotations.

First year students will prepare for clinical rotations on Tuesdays and Thursdays during the first 4 weeks of the first fall semester. This will include taking CPR class and attending clinical site orientations and tours. A pre-clinical schedule will be provided to the student. First year students will not begin clinical rotations until the 5<sup>th</sup> week of the first fall semester (subject to change).

*\*Due to challenges created by the COVID-19 pandemic, or any other future pandemics or states of emergency, the didactic and clinical schedules are subject to change. This may be necessary to ensure students graduate on time. Any changes made to the didactic and/or clinical schedules will follow guidelines put forth by the JRCERT, the ARRT, and State Technical College of Missouri. Alterations may include, but are not limited to, temporarily delivering courses online, temporarily altering the course of study, and/or requiring clinical time to be made up in the event that clinical education centers close to students. Make-up time will be completed according to guidelines approved by the JRCERT, which may include clinical rotations on weekends, holidays, and scheduled college breaks. In addition, the student may work clinical shifts of up to ten (10) hours at a time. All clinical schedule alterations due to the COVID-19 pandemic, or any other pandemic or state of emergency, will be approved by the Program Director, Clinical Coordinator, and clinical education center.*

## AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGY (ARRT) Certification and Registration

### STEP 1: EDUCATION

The first step toward ARRT certification and registration in radiography requires completion of a radiography program that is accredited by the JRCERT. The student must complete all didactic and clinical competency requirements before graduating. **Program completion does not guarantee eligibility to take the ARRT exam.** The ARRT's didactic and clinical competency requirements are available at [arrt.org](http://arrt.org).

### STEP 2: ETHICS

In order to protect the patients' best interest and safety, the Radiologic Technology (R.T.) student must be responsible and trustworthy. The ARRT emphasizes that students who are applying for certification and registration have good moral character. All students must review the ARRT Standards of Ethics, which describes behaviors expected of the R.T., as well as behaviors that are not tolerated. The Standards of Ethics also include a Code of Ethics (guidelines for R.T. behavior) and the Rules of Ethics (mandatory, enforceable standards). [Click here for ARRT ethics requirements.](#)

Any violation of the ARRT Standards of Ethics, including a charge or conviction of a misdemeanor or felony, may indicate a lack of good moral character. All ethics violations must be reported to the ARRT within **30 days** of the occurrence. Convictions that occurred prior to being admitted to the MRT program must also be reported to the ARRT. Failure to report a potential violation may have consequences more severe than for the violation itself. [Click here for a list of ethical violations.](#)

Students who have violated the ARRT's Rules of Ethics must report the potential violation using one of the following methods:

- Submit an ethics review pre-application, available on the ARRT'S website (if you have not yet started the program or have more than 6 months remaining in the program)
- Answer the questions on your ARRT Exam Application and submit supporting documents (if you have less than 6 months left in the program or have already graduated)

The ARRT Ethics department can be contacted at 651.687.0048, extension 8580.

### STEP 3: EXAMINATION

Each student will receive an application for the ARRT exam during their final semester in the program. Upon graduation, students who meet the ARRT's education and ethics requirements will have the opportunity to take the ARRT certification and registration exam in Radiography. A minimum score of 75 is required to pass the exam. Candidates who pass the radiography exam will earn the credentials R.T. (R). The ARRT radiography exam fee is \$225.00 (subject to change) and is the responsibility of the student.

General ARRT inquiries can be directed to:

The American Registry of Radiologic Technologists  
1255 Northland Drive  
St. Paul, MN 55120  
651.687.0048  
[www.arrt.org](http://www.arrt.org)

## MRT PROGRAM POLICIES & PROCEDURES

### ACADEMIC INTEGRITY

The MRT program has an academic integrity policy that aligns with State Tech's academic integrity policy and industry standards (see the [State Tech Policy Library](#)).

Academic misconduct is any act that does or could improperly distort students' grades or other student academic records. Academic misconduct is cheating the student of learning the needed skills and an offense to the academic integrity of the learning environment. All forms of academic dishonesty will call for discipline.

Unprofessional and dishonest acts include, but are not limited to:

1. Copying/submitting another person's work.
2. Unauthorized taking of someone else's work.
1. Using unauthorized notes or equipment (including programmable calculators) during an examination.
2. Stealing an examination or using a stolen examination.
3. Allowing another student to have access to your work, thereby enabling that student to represent the work as his/her own.
4. Falsifying a patient's clinical record.
5. Plagiarizing any assignment. "Plagiarism" means using someone else's ideas or words without using quotation marks and/or giving credit by citation of source(s).
6. Theft from a patient or associate and theft of supplies, other material, or equipment from the school or clinical sites.
7. Altering grades on examinations or assignments.
8. Post-examination alterations.
9. Leaving clinical site premises while on clocked clinical time.
10. Clocking in or out for another student at the clinical education center.

MRT faculty will use any one or more of the following disciplinary measures for a case of dishonesty:

- A zero for the assignment
- An "F" for the course
- Separation from the program

### ACCIDENTS

The Program Director must be made aware of all accidents on campus or at a clinical education center within 24 hours of the occurrence. Program faculty and students will follow the State Tech accident reporting procedures (see the [State Tech Policy Library](#)).

### ARTICULATION AGREEMENTS

Central Methodist University, a partner institution, offers a Bachelor of Science degree in Health Sciences. For more information, contact the Admissions Office (e: [admit@ucmo.edu](mailto:admit@ucmo.edu) p: 660.543.4290).

## ATTENDANCE

### Expectations

Educational opportunities are available to the student each day of class and clinical. Absenteeism is to be avoided if at all possible. Regular attendance is a good habit and is a predictor of future success. Absence from a class can never be completely made up because the student will have missed class discussion, teacher presentations, and his / her own opportunity to participate. It is not possible to teach someone who is not present. Thus, there is a close relationship between poor attendance habits and classroom failure. Beyond the classroom, you will find employers who are hesitant to hire anyone with a history of poor school attendance. A student may be separated from the MRT program for failure to follow the attendance policy.

### Class Attendance

Attendance for each class will be taken according to the system outlined in your course syllabi. For each class, you will be counted: *present, absent, late or excused*. The student will be able to view his / her attendance for each class in the online learning management system.

If a student must miss a class, the instructor should be notified prior to the start of class. Instructors should also be notified prior to class if the student will be late or needs to leave early. If a student must miss an entire class day, the MRT Program Director must be notified by 8:00 a.m., via e-mail or phone call. Course syllabi will state the maximum number of days a student may be absent from class before separation from the MRT program may occur.

### Clinical Attendance

Students must notify the clinical site **and** MRT faculty of clinical absences or tardiness *before* 7:30 a.m. for day shift rotations and *before* 1:00 p.m. for evening rotations. The program defines tardiness as being more than 5 minutes late for the scheduled rotation. The student must call the clinical site directly. The Program Director and Clinical Coordinator can be contacted via e-mail or phone call. In addition, if a student leaves the clinical site early, for any reason, the clinical site **and** MRT faculty must be notified. Failure to comply with the policy will result in a deduction of points from your clinical grade. Repeat offenses risk possible separation from the MRT program. A clinical absence form must be filled out and given to MRT faculty if a student knows he/she will miss a clinical day, or part of a clinical day, ahead of time.

Each Clinical Education course requires a *minimum* number of hours which the student *must* attend clinicals. These hours will be provided in each Clinical Education course syllabus and may vary from semester to semester. Each semester, a specified number of extra hours are built into the clinical schedule and may be used at the discretion of the student (ex: a doctor's appointment or sick day). ***This time is also used for clinical cancellations due to inclement weather. It is highly recommended that students use their time wisely and only take off from clinicals when absolutely necessary.*** Students who fall below the minimum number of clinical hours will be required to make the time up at the discretion of the MRT program faculty and clinical site, or risk separation from the MRT program. Students who need to make up time must consult with the Clinical Coordinator on how and when the time should be made up. The time will not be acknowledged if the student makes up time without consulting with the MRT faculty first. Students may not make clinical time up ahead of time (i.e., students may not do extra clinical rotations in order to "bank" time). At the end of each semester, students who have not completed the minimum number of clinical hours will receive an "Incomplete" in the Clinical Education course and risk separation from the MRT program.

## **Excused Absences**

Excused absences include:

- Death in the student's immediate family (Copy of service program required.)
  - The definition of "immediate family" includes spouse, child, parent (including step-mother or step-father), spouse's child or parent, sibling, grandparent or grandchild, spouse's grandparent or grandchild, daughter-in-law, son-in-law, sister-in-law, brother-in-law, aunt, uncle, great-aunt, great-uncle, other members of the student's household, State Tech employee, fellow student, or anyone for whom the student will serve as a pall bearer.
- Approved State Tech functions such as: testing, SkillsUSA, Postsecondary Agricultural Student Organization (PAS), job fair, field trips
- Jury Duty (Copy of jury duty summons required.)
- Subpoena to Appear in a Court of Law (Copy of subpoena required.)
- Military Obligations (Copy of military orders required.)

## **Class Cancellations / Weather-Related Absences**

State Tech will hold classes beginning at the usual time unless announced otherwise on the stations listed below. An inclement weather notification will also be sent through the [State Tech Alerts system](#).

When it is determined that class starting time should be delayed due to inclement weather, classes will meet on the "Snow Schedule." If the College is on "Snow Schedule," classes will begin at 10:00 a.m. Classes that meet prior to 10:00 a.m. will be cancelled. Report to your 10:00 a.m. class or the class that would normally be in session at 10:00 a.m. This will allow students and staff the opportunity to start to classes after the roads have been cleared and the campus prepared. If the College is on "Snow Schedule," and it is a clinical day for the student, the student should report to his/her clinical assignment at 10:00 a.m. (or at the normal time for evening rotations). It is the student's responsibility to notify the clinical site if he/she will be late due to inclement weather. In all cases, students should use their own judgment regarding hazardous driving conditions. The College will attempt to decide and notify the media prior to 6:00 a.m.

Notifications will be aired on:

### Television Stations:

- KRCG-TV Channel 13 [www.krcg.com](http://www.krcg.com) Jefferson City
- KOMU-TV Channel 8 [www.komu.com](http://www.komu.com) Jefferson City/Columbia
- ABC-17 TV Channel 17 [www.kmiz.com](http://www.kmiz.com) Columbia

### Radio Stations:

- KWOS Radio 950 AM Jefferson City
- KCLR Radio 99.3 FM Columbia
- KJMO Radio 100.1 FM Jefferson City
- KLIK Radio 1240 AM Jefferson City

If State Tech classes are in session and a student is unable to attend class/clinical rotations due to inclement weather in the area where he/she lives, the student will be counted absent for the day.

If a class must be cancelled for reasons other than inclement weather, the course instructor will notify the students as soon as possible. Each instructor will determine class notification procedures in the event of a class cancellation on short notice. Class notification procedures will be posted in your syllabus or Moodle.

### **BACKGROUND CHECK**

As a requirement for the clinical education component of the MRT program, all students must go through a background check. The background check is done through Verify Students, a division of the Corporate Screening Company. Students are responsible for paying the associated fees. Students who do not meet the requirements of the background check may not be allowed to attend clinicals and may be separated from the MRT program.

### **CANVAS**

The student is responsible for checking the online learning management system (Canvas) to view course grades, job readiness scores, and attendance records. Instructors may also use Canvas to communicate with the class and provide course updates; therefore, it should be checked frequently.

### **CHANGE OF STUDENT INFORMATION**

It is the student's responsibility to report any changes of student information (name, address, telephone number, etc.) to the Program Director and Registrar's Office as soon as possible.

### **COMMONS AREAS**

Students are responsible for picking up after themselves in order to keep Health Science Center commons areas clean for everyone's enjoyment. Noise should be kept to a minimum in student commons areas.

### **CONDUCT**

As an MRT student, you represent the radiologic profession as well as State Tech. It is expected that you conduct yourself in a positive manner at all times. You are considered a "student" while at various affiliating agencies. The Clinical Education Center will consider the Clinical Instructor responsible for all students' activities and behavior during their rotation through each clinical education center. As a Radiologic Technology student in the affiliating centers, you will be involved with physicians, nursing personnel, radiology department personnel, other affiliated departments (such as operating room personnel, emergency room personnel, etc.), and with patients. This will require that you conduct yourself with an attitude of maturity. The Clinical Education Centers are therapeutic and learning environments where rowdiness, inappropriate language, and behavior are prohibited.

Students should refrain from:

- using vulgar, obscene, or profane language
- gossiping
- willful destruction or stealing of public or private property in the school or clinical education center
- willfully engaging in conduct which is detrimental to others, including verbal disagreements with instructors or peers, or offensive social media posts.

Students may be separated for insubordination, dishonesty, drunkenness or immoral conduct, or for disobedience of the following:



1. Commission of a felony on or off school/clinical property
2. Possession/use of weapons of any description on school/clinical property
3. Commission of a misdemeanor on or off school/clinical property
4. Possession or consumption of alcoholic beverages or controlled substances on school or clinical property, or at functions sponsored by the school. If a student is suspected of being under the influence of drugs or alcohol at school or at a clinical facility, they will be referred to the State Tech Counseling Services.
5. Refusal or failure to obey any reasonable written or oral order by any administrative personnel, faculty member, or security officer of the school
6. Cheating, attempting to cheat, or assisting others in cheating
7. Failure to comply with academic integrity policy

Any student found guilty of rule violation is subject to disciplinary action. Repeated offenses will be viewed as disinterest by the student, which may result in separation from the MRT program.

Students should become familiar with State Tech's [Student Code of Conduct](#).

### **COUNSELING SERVICES**

State Tech provides a variety of counseling services to promote the health, safety, and overall well-being of students. Services are confidential and may be used for personal and academic issues. State Tech Counseling Services provide a variety of resources concerning academics, anxiety/depression, relationships, sexual assault/harassment, smoking cessation, substance abuse, and suicide prevention. [Click here for State Tech Counseling Services](#).

### **DISABILITY ACCOMODATIONS**

State Tech provides equal opportunities for students in accordance with the Rehabilitation Act of 1973 and Americans with Disabilities Act of 1990. State Tech also provides support for students who have documented permanent disabilities by making reasonable accommodations for academic instruction and other student related activities (see the [State Tech Policy Library](#)). Students seeking accommodations must contact their State Tech counselor.

### **DRESS CODE**

Students are required to dress appropriately for class. Examples of unacceptable clothing include: clothing displaying sexual innuendos or suggestive language; clothing displaying obscene, lewd, or vulgar comments or designs; and clothing with holes in inappropriate places or see-through clothing. Repeated refusal to comply with this policy may result in disciplinary action.

Students participate in some functions that take place outside the classroom, such as professional development conferences, state advocacy events, and clinical site tours and orientations. The dress code for these functions is the State Tech polo shirt, khaki or dress pants, and closed-toe dress shoes (no jeans, tennis shoes, or flip flops).

### **DRUG SCREENING**

As a requirement for the clinical education component of the MRT program, all students are subject to a drug screening once per program year. The drug screening is done through Verify Students, a division of the Corporate Screening Company. Students are responsible for paying the associated fees. Students who do not meet the requirements of the drug screening will be separated from the MRT program on the premise that

the student will not be able to complete required clinical rotations and will therefore be unable to complete the MRT program requirements.

## **ELECTRONIC DEVICES**

### **Calculators**

Calculators may be used on tests and quizzes at the discretion of the instructor. Programmable calculators and cell phone calculators are not allowed.

### **Cell Phones**

Cell phones must be turned off and put away during class. Disciplinary action for use of cell phones during class may include, but is not limited to, percentage points deducted from the final class grade for each occurrence, loss of points on job readiness or attendance scores, and / or being asked to leave the classroom. Students should speak with the instructor prior to the beginning of class if special circumstances arise such that the student needs access to his/her cell phone during class. Cell phones may not be used during exams for any reason, including for using the calculator. ***Use of cell phones in the clinical setting is prohibited.***

### **Laptops & Tablets**

Students will need access to a computer throughout the program for accessing the online learning management system (Canvas), completing written assignments, and taking online courses. Common programs used are Microsoft Word, Excel, PowerPoint, and Adobe. Before purchasing a laptop or tablet, students should contact the State Tech IT Help Desk to ensure compatibility.

## **EMAIL**

Students must check their State Tech student e-mail accounts on a daily basis. This is the only e-mail address that State Tech and MRT faculty and staff will use to communicate with the student.

## **EMERGENCY RESPONSE & SAFETY**

The college's emergency response and safety policy can be found at <https://www.statetechmo.edu/policy/>. Security is viewed as the responsibility of the entire college community. **Call 911 to report a crime or an emergency on the State Tech campus.**

## **ENERGIZED X-RAY LAB UTILIZATION POLICY**

The energized x-ray lab is available for all students in the Medical Radiologic Technology Program at State Tech for the purpose of enhancing the learning experience and completing required course assignments. All students must adhere to the following rules when utilizing the energized x-ray lab. Failure to follow the rules may result in permanent separation from the MRT program.

1. Students will wear their dosimeters anytime they participate in activities requiring exposures to be made in the x-ray lab.
2. Students shall not complete an exposure without the presence of a qualified instructor in the lab.
3. Under no circumstances shall any individual be exposed to the primary beam.
4. Prior to making any x-ray exposure, all individuals must exit the x-ray room and remain behind the protective barrier until the exposure has been completed.

5. Students are responsible for checking technical factors to ensure correctness prior to making an exposure.
6. Students shall not expose a radiation monitoring device to the primary beam.
7. The door to the energized lab will remain locked any time a qualified instructor is not readily available to provide supervision in the energized lab.

## **EXAM PROCEDURES**

When tests or quizzes are given, your desk must be completely clear of any personal or school items, except your pen/pencil, testing materials, and calculator, if required. All cell phones must be turned off and put away.

## **FIRE DRILL / EVACUATION**

In the event of a fire in the MRT classroom or Health Science Center, all faculty, staff, and students will evacuate the building and meet in the Health Science Center Field (the field adjacent to the Health Science parking lot that connects to the Utility and Civil Technology Centers parking lots).

## **GRADING**

The syllabus for each class will indicate how academic grades are determined. The MRT program uses the following grading scale in all MRT courses:

### **Grading Scale:**

A = 93 to 100%

B = 85 to 92.9%

C = 75 to 84.9%

D = 65 to 74.9%

F = 64.9% and below

***\*Students must score 85% or higher in all Procedures and Clinical Education courses***

***\*Students must score 75% or higher in all other MRT courses***

Throughout the program, students must maintain an aptitude for radiologic technology. This is determined by clinical affective evaluations, academic grades, attendance, and the student's adherence to program policies. Students must maintain satisfactory grades. ***Course grades of less than 75% are unacceptable. Clinical grades and Procedures course grades of less than 85% are unacceptable.*** At the end of each semester students must have course grades 75% or higher; Clinical and Procedure course grades must be 85% or higher. Students not achieving the required scholastic grades may be separated from the MRT program. If a student has a concern about the academic grade earned in a class, the first step is to talk to that instructor, and then to the student's academic advisor.

## **GRIEVANCE PROCEDURE**

Students should make every effort to communicate with program faculty when there has been a misunderstanding or disagreement, or if they have questions about MRT program policies and procedures. If a student who has attempted to communicate concerns with program faculty has not found a satisfactory resolution, he/she may submit a [General Complaint Form](#), available under the "ready to report" section of the [Counseling Services](#) webpage. If the student is still dissatisfied with the outcome, then he/she may submit a [Student Grievance Form](#), also available on the Counseling Services webpage.

## HARASSMENT

Violations of the college's [Harassment Policy](#) will not be permitted. Any student who violates this policy will be subject to discipline up to, and including, suspension or expulsion from the College. Any student who feels that he/she is a victim of harassment should immediately report the incident using the "ready to report" system available on the [Counseling Services](#) webpage. The incident will be thoroughly investigated. The confidentiality and privacy of the employee/student and those involved will be respected during the investigation.

## IMMUNIZATION & PHYSICAL EXAM REQUIREMENTS

All immunizations must be up-to-date before clinical rotations start. Students must have their physician sign the health physical from provided by the MRT program. Failure to comply may result in being prohibited from participating in clinical rotations and, therefore, a separation from the MRT program. Students seeking a COVID vaccine waiver are responsible for contacting each clinical site and following the site's specific steps for obtaining a waiver. If a student cannot attend multiple clinical sites due to not having the appropriate vaccinations and/or waivers in place, the student may not be able to complete the clinical education component of the program and will be separated from the MRT program.

List of required vaccinations:

- 2-step PPD skin test
  - *If 1<sup>st</sup> step is (-), repeat PPD after 2 weeks*
  - *If PPD is (+), chest x-ray report required*
- Tdap
  - *At least one in adult life*
- Td
  - *within last 10 years*
- Polio vaccine
  - *If there is no record of the polio vaccine, a Polio titer is required*
- Varicella (chicken pox)
  - *2 vaccines required (the 2<sup>nd</sup> 4 weeks after the 1<sup>st</sup>)*
  - *If there is no record of the varicella vaccination, a Varicella titer is required*
- MMR
  - *2 vaccines*
  - *If there is no record of the MMR vaccination, an MMR titer is required*
- 3 dose series Hepatitis B
  - *3 dose series; provide dates of each*
    - *2<sup>nd</sup> injection 30 days after 1<sup>st</sup>*
    - *3<sup>rd</sup> injection 60 days after 1<sup>st</sup>*
  - *If there is no record of HepB vaccination, a HepB titer is required*
- COVID-19
- Flu shot
  - *By September 30<sup>th</sup> of each year (the flu shot is typically available in September)*

## INFECTION CONTROL

Students are expected to:

- Take their temperatures before arriving on campus or at a clinical education center. Students with a fever (100.4 degrees or higher) should not go to campus or the clinical education center. Students should be fever-free for 24 hours before returning to class or clinical. The college and program faculty reserve the right to take any students' temperature while they are on campus.

- Wash hands or use hand sanitizer upon arrival to and departure from campus and clinical facilities, and regularly throughout the day. Hand sanitizer will be provided in the classroom and lab. Soap and water are provided in the lab area and in the public restrooms.
- Disinfect equipment and furniture before and after use. Disinfectant will be provided for use on college equipment and furniture. Students may choose to provide their own disinfecting wipes to clean their desks. Students should refer to specific policies and procedures for disinfecting equipment at each clinical facility.
- Wear a face mask when required by the college, instructor, and/or clinical facility. This may be required when social distancing is not possible, such as in a lab setting, and instructors reserve the right to request all students to wear masks anytime. When masks are required on campus or at clinical education centers, it is the student's responsibility to provide the mask.
- Wear gloves, when appropriate, in the lab and clinical settings.

## **INFECTIOUS DISEASES**

Students with communicable diseases that pose a risk of transmission in school or at school activities will be managed as required by law and in accordance with guidelines provided by the Department of Health and Senior Services (DHSS) and local, county or city health departments. Management may include, but is not limited to, exclusion from school or clinical assignments as needed for the health and safety of students, staff, and patients. **Students are asked to stay home and avoid participating in face-to-face classes and clinical education if they have the following:**

- A temperature of 100.4 degrees or above
- Known exposure to someone with COVID-19
- At least 2 of the following symptoms:
  - Fever (100.4 or higher)
  - Chills
  - Muscle pain
  - Headache
  - Sore throat
  - New loss of taste or smell

Students infected with chronic communicable diseases that *do not* pose a risk of transmission in school or at school activities (such as, but not limited to, hepatitis B virus or HIV) shall be allowed to attend school or continue to work without any restrictions based solely on the infection.

## **JRCERT STANDARDS**

The JRCERT Standards for an Accredited Educational Program in Radiography are available at [www.jrcert.org](http://www.jrcert.org). Any student who believes the program to be in violation of upholding the JRCERT Standards should submit a written dispute to the Program Director. If, after communicating his/her concerns with the Program Director, the student is not satisfied with the outcome and still believes the program to be in violation of upholding the JRCERT Standards, then the student should follow the procedure for filing a grievance (see pg. 19) . If a complaint has not been resolved after following institutional policies, the student may submit allegations of non-compliance to the JRCERT. Contact information is available at [www.jrcert.org](http://www.jrcert.org) or the student can e-mail the JRCERT at [mail@jrcert.org](mailto:mail@jrcert.org)

## **LAB & CLASSROOM EXPECTATIONS**

Students are responsible for cleaning up and disinfecting their individual seating areas and the x-ray lab and classroom before leaving each day. All supplies must be returned to their designated storage areas. This includes, but is not limited to, positioning aids, image receptors, anatomic models, linens, and other patient care items or learning resources. Cabinets in the classroom and lab are clearly labeled with the items they store. Items taken from the storeroom must be returned to the storeroom. Students are expected to take great care with handling and storing all learning resources (such as the ones listed above) to ensure current and future classes have the best learning opportunities. Counter and tabletop surfaces must be disinfected before leaving each day. Students are not to use the classroom counters or cabinets for storage of textbooks or other personal items. Students may have snacks and closed drink containers at their classroom seats. **Food and drinks are not allowed in the energized x-ray lab.** X-ray tables, patient stretchers, wheelchairs, and other equipment are not to be used for lounging or as a place of rest.

## **LIBRARY SERVICES**

The State Tech Library is located in the Information Technology Center. Hours of operation are posted on the [Library's website](#). Online resources are available to students, including [library guides specific to MRT](#).

## **LAMBDA NU**

Lambda Nu is the National Honor Society for the Radiologic Technology and Imaging Sciences. The Missouri Iota Epsilon Chapter was established at State Tech in 2016 to recognize academic achievement in the MRT program. Students may qualify for membership after completing their first year of the program and achieving a minimum GPA of 3.5. Being a member of Lambda Nu is an honor and may offer scholarship opportunities. The Program Director will notify students on an individual basis after the completion of their first year in the program if they qualify for Lambda Nu membership.

## **LOCKERS**

Students will be assigned lockers on a first come, first served basis and must inform the Program Director if they want a locker assigned to them. The student is responsible for supplying a combination lock to secure his/her items. Sharing lockers is allowed between mutually agreeing students.

## **MISSOURI SOCIETY OF RADIOLOGIC TECHNOLOGISTS (MoSRT)**

Each student will join the MoSRT for two years at a total cost of \$20.00 (subject to change). In addition, the student will attend the annual MoSRT conference during each spring semester of the program. The student is responsible for the conference fees (\$170 each spring semester, subject to change) and any associated travel and / or lodging fees. The MoSRT offers a student conference registration rate, as well as an "early bird" registration rate. All fees are subject to change.

Joining the MoSRT and conference attendance are program requirements. Occasionally, circumstances arise that prohibit a student from attending conference. These situations must be brought to the Program Director immediately. Students who do not attend conference can expect to attend clinicals in lieu of the conference and submit an alternative assignment to compensate for missing out on valuable educational seminars and conference-related assignments.

## **PARKING**

Students may park in any white striped parking spots on campus. There is ample parking available in the Health Science Center parking lot. Students may not park in green striped parking spots (employee parking). See the [State Tech Policy Library](#) for the campus parking policy. Students must follow parking policies at each

clinical education center, which may include purchasing a parking pass. Students are responsible for paying parking fines received while on campus and at clinical education centers.

## **PEER MENTORING**

Peer mentoring is used to help new students adjust to the college and clinical settings. Mentoring is an effective method to promote college success and increase student satisfaction with the college experience. This can lead to increased program retention, better academic performance, improved attendance, increased involvement, and reduced anxiety. Each 1<sup>st</sup> year student will be assigned a mentor from the 2<sup>nd</sup> year cohort. Mentors and mentees are expected to meet on a monthly basis (at a minimum) and complete activities as assigned by program faculty.

## **PHYSICAL REQUIREMENTS FOR RADIOGRAPHY STUDENTS**

The list below includes general requirements for the performance of radiologic technologist duties. Students in the MRT program should expect to perform the same job duties as registered radiologic technologists. This is not an exhaustive list of duties, responsibilities, or requirements.

- Frequent lifting, pushing, pulling, and carrying items weighing up to 50 pounds unassisted.
- Frequent bending, reaching (including overhead), repetitive hand movements, standing, walking, squatting and sitting, with some heavy lifting, pushing and pulling exerted regularly.
- Lifting patients to and from radiographic tables, wheelchairs, and stretchers while utilizing good body mechanics.
- Pushing beds, stretchers, and wheelchairs with and without medical equipment attached.
- Manual and finger dexterity and eye-hand coordination for operating radiographic equipment.
- Manual palpation of anatomic landmarks on patients and manual positioning of patients for radiologic procedures.
- Requires exposure to communicable diseases, toxic substances, ionizing radiation, medicinal preparations and other conditions common to a hospital environment. Appropriate PPE must be worn according to facility policies and procedures.
- Hearing: Must be adequate to perform job duties in person and over the telephone.
- Speaking: Must be able to communicate clearly in person and over the telephone.
- Vision: Must be able to see clearly at a distance and up close. Must be able to read information from printed sources and computer screens.

## **PROFESSIONAL LIABILITY INSURANCE**

State Tech shall carry professional liability insurance which covers students during their participation in any classroom/lab and/or clinical experience at any clinical education center.

## **RAVE ALERT SYSTEM**

Students can register for the [RAVE Alert System](#) in order to receive emergency communications and other important information via text message and e-mail from State Tech.

## **RE-ADMISSION**

Students who withdraw or are separated from the program may re-apply to the program at the appropriate semester the following academic year. There is no guarantee the student will be re-admitted to the MRT program.

**SMOKING**

State Tech is a tobacco-free campus (see the [State Tech Policy Library](#)). Smoking and the use of smokeless tobacco, e-cigarettes, and other smoking devices are not permitted inside any building or vehicle owned, leased, and/or operated by the College. Those seeking assistance with smoking cessation should visit [Counseling Services](#). Students are advised that some healthcare organizations do not hire smokers.

**STUDENT IDENTIFICATION**

Valid student ID cards are required of all students. Report lost or stolen ID cards to the Student Activities Office located in the Activity Center. A fee is required for replacement.

**SUBSTANCE ABUSE**

The College strives to maintain a working and learning environment that is free from the effects of alcohol and illegal drugs. Students seeking help with substance abuse should contact [Counseling Services](#).

**TEST SCORE APPEAL PROCESS**

If a student is not satisfied with a test grade, he / she should request a conference with the course instructor.

**TORNADO DRILL / WARNING**

In the event of a tornado drill or actual tornado, faculty, staff, and students who are in the Health Science Center will take shelter in the Physical Therapy Assistant (PTA) classroom (room 129). Remain in this room until an "All Clear" has been initiated by the college.



## CLINICAL EDUCATION POLICIES & PROCEDURES

### CLINICAL EDUCATION CENTERS

In order to complete the clinical component of the program, students will rotate through the following clinical education centers (*subject to change*), as assigned by the Clinical Coordinator:

Boone Hospital Center, Columbia

Jefferson City Medical Group, Jefferson City

Capital Regional Medical Center, Jefferson City

Hannibal Regional Hospital & Outpatient Center, Hannibal

Goldschmidt Cancer Center, Jefferson City

Missouri Orthopaedic Center, Columbia

Mercy Hospital & Clinic, Washington

University of Missouri Hospital, Columbia

Clinical rotations include day and evening shifts, with a half hour break for lunch or dinner. All students will participate in day and evening shifts, as assigned by the Clinical Coordinator.

#### Boone Hospital

8:00 a.m. – 4:00 p.m.

1:00 p.m. – 9:00 p.m.

#### Jefferson City Medical Group

8:00 a.m. – 4:00 p.m.

#### Capital Regional Medical Center

7:30 a.m. – 3:30 p.m.

1:00 p.m. – 9:00 p.m.

#### Hannibal Regional Hospital & Outpatient Center

9:00 a.m. – 3:30 p.m.

#### Goldschmidt Cancer Center

7:45 a.m. – 3:45 p.m.

#### Missouri Orthopaedic Center

8:00 a.m. – 4:00 p.m.

#### Mercy Hospital & Clinic

8:00 a.m. – 4:00 p.m.

#### University of Missouri Hospital

8:00 a.m. – 4:00 p.m.

1:00 p.m. – 9:00 p.m.

All times are subject to change. Each student will receive a clinical assignment from the Clinical Coordinator.

## CLINICAL OBJECTIVES

Clinical rotations provide the student with the opportunity to practice the skills and theory taught in the classroom. The **FIVE STEPS TO CLINICAL COMPETENCY** allows the student to progress in competency exams, while practicing patient care and professionalism.

- Achieve Clinical Competency by progressing through the FIVE STEPS
- Reinforce learned skills by continuing to perform examinations after achieving competency
- Demonstrate professional behavior
- Provide basic patient care and comfort and respond correctly to emergency situations
- Follow appropriate infection control guidelines
- Provide appropriate patient education and maintain patient and department records
- Participate in Quality Control and Quality Assurance procedures
- Practice radiation protection for patients, self, and other health care workers
- Operate medical imaging equipment and accessory devices
- Recognize equipment malfunctions and report them to the proper personnel
- Participate in specialty rotations
- Demonstrate knowledge and skills relating to verbal, nonverbal, and written medical communication in patient care intervention and professional relationships
- Support the profession's code of ethics
- Comply with the radiologic technologist's scope of practice

## CLINICAL EDUCATION SUPERVISION

Until a student achieves and documents competency in any given procedure, all clinical assignments must be carried out under the **direct supervision** of a qualified radiographer. A qualified radiographer possesses the American Registry of Radiologic Technologists (ARRT) certification and credentials.

### DIRECT SUPERVISION

1. A qualified radiographer reviews the procedure in relation to the student's achievement.
2. A qualified radiographer evaluates the patient's condition in relation to the student's knowledge.
3. A qualified radiographer is present throughout the performance of the procedure.
4. A qualified radiographer reviews and approves the procedure and/or image(s).
5. Unsatisfactory radiographs must be repeated in the presence of a qualified radiographer.

Regardless of the level of competency achieved, students must perform all repeat radiographs in the presence of a qualified radiographer. Students must also be directly supervised during all surgical, mobile, and fluoroscopic procedures, regardless of the level of competency the student has achieved.

### INDIRECT SUPERVISION

Indirect supervision is defined as supervision provided by a qualified radiographer immediately available to assist students regardless of the level of student achievement. "Immediately available" is interpreted as the physical presence of a qualified radiographer adjacent to the room or location where a radiographic procedure is being performed. This availability applies to all areas where ionizing radiation equipment is in use on patients. Being able to reach a qualified radiographer by phone is not acceptable for indirect supervision.

Upon completion of the "Five Steps to Clinical Competency" students may perform radiographic examinations under indirect supervision.

1. A qualified radiographer must be immediately available, i.e. in an adjacent room.
2. All radiographs must be reviewed and approved by a qualified radiographer before being submitted to a radiologist.
3. All unsatisfactory radiographs will be repeated only in the presence of a qualified radiographer.

The program's supervision policy follows the JRCERT Standards for an Accredited Educational Program in Radiologic Sciences, 2021, Standard 5.4.

## THE 5 STEPS TO CLINICAL COMPETENCY

### STEP ONE

The examination is introduced in Radiographic Procedures class. The student will participate in guided discussion, demonstration, reading assignments, radiographic anatomy review, and positioning practice.

### STEP TWO

In the classroom, the student will achieve at least an 85% on a written examination covering the unit material. The test scores for these exams are applied to the Radiographic Procedures grade. If a student fails the Step Two written exam, it is the student's responsibility to contact the Procedures instructor for another testing date. Retesting will be at the instructor's convenience before or after class hours.

### STEP THREE

In the laboratory, under the direct supervision of the Procedures instructor, utilizing a fellow student as a model, the student will correctly perform the examination according to a demonstration check list. The student must achieve at least an 85% for the Step Three competency. The test scores for these examinations are applied to the Radiographic Procedures lab grade. If a student fails the Step Three check list, it is the student's responsibility to contact the Procedures instructor for another testing date. Retesting will be at the instructor's convenience before or after class hours, or during the week of final exams.

### STEP FOUR

**Coupons** - In the clinical education center, under direct supervision of a qualified radiographer, the student will correctly perform examinations on one to three patients, depending on the coupon guidelines for that particular procedure. The student will ask the supervising technologists to check off and initial the coupon the student provides.

### STEP FIVE

**Clinical Competency Evaluation** - Under the direct supervision of the Clinical Instructor, the student will correctly perform the examination according to the clinical competency evaluation. A score of 85% is necessary to achieve clinical competency. **A technologist must be post-graduation for at least 1 year prior to signing clinical competencies. A Clinical Instructor must sign each competency.** Test scores for these exams apply to the clinical grade.

- A student may not progress to the next step until the previous step is completed.  
*Example: If a student does not pass Step 2 in the classroom, he/she will not receive the Step Four coupons and may not test out on a patient at the hospital for Step 5.*
- For each mandatory competency exam learned in procedures class, the student will progress through all the steps.
- After competency is achieved, the student may perform the procedure under indirect supervision.
- Regardless of the level of competency achieved, students must perform all repeat radiographs in the presence of a qualified radiographer.

## CLINICAL COMPETENCIES

Students must earn a total of **sixty-one (61)** clinical competencies prior to graduation. This includes **36 mandatory** exams, **15 elective** exams, and **10 patient care** competencies. Before earning competencies, students must earn the required number of coupons for each exam, which are listed below. Students must achieve a minimum number of competencies each semester. **Failure to complete the minimum number each semester will result in a 10% deduction from the clinical grade. Failure to complete all 61 competencies by the end of semester 5 will result in an incomplete clinical grade, delayed program completion, and delayed eligibility for taking the ARRT exam.** A complete checklist of ARRT clinical competency requirements can be found at [arrt.org](http://arrt.org).

### **3 Coupon Mandatory**

Abdomen Portable  
 Abdomen Supine  
 Abdomen Upright  
 Ankle  
 C-Arm (more than 1 projection)  
 C-Arm (in a sterile field)  
 Cervical Spine  
 Chest Routine: PA & Lateral  
 Chest: AP wheelchair/Stretcher  
 Chest Pediatric (2 Projection)  
 Chest Portable  
 Clavicle  
 Elbow  
 Finger / Thumb  
 Foot  
 Forearm  
 Geriatric Chest (PA & Lateral)  
 Geriatric Upper or Lower Extremity  
 Hand  
 Hip  
 Humerus  
 Knee  
 Lumbar spine  
 Mobile/Portable Upper or Lower extremity  
 Pelvis  
 Shoulder  
 Thoracic spine  
 Tibia / Fibula  
 Trauma Lower Extremity  
 Trauma Upper Extremity  
 Wrist

### **2 Coupon Mandatory**

Femur  
**1 from head unit: Nasal Bones, Facial Bones, Skull, Orbits, Sinuses**  
 Ribs  
 Trauma Hip (AP & Axialateral)  
 Trauma Shoulder  
**2 fluoroscopy exams**  
**UGI, Barium Enema / ACBE**  
**Esophagram**  
**1 Coupon Mandatory**  
 Trauma lateral Spine (dorsal decubitus)  
**2 Coupon Elective**  
 Abdomen Lateral Decubitus  
 Calcaneus  
 Chest Lateral Decubitus  
 Esophagram  
 Geriatric hip or spine  
 IVP / IVU  
 Orbits (must include Rhese)  
 Patella  
 Pediatric Abdomen  
 Pediatric Lower Extremity  
 Pediatric Upper Extremity  
 Small Bowel Series  
 Scoliosis series  
 Toes

### **1 Coupon Elective**

AC joints  
 Cystogram / VCUG  
 Mandible / Panorex  
 Pediatric Mobile/Portable  
 Sacrum / Coccyx  
 Scapula  
 Sacroiliac joints  
 Soft tissue neck  
 Sternum  
 Sternoclavicular joints  
 Temporomandibular joints

### **Mandatory Patient Care Comps**

1. CPR/BLS Certification
2. Vital signs – blood pressure
3. Vital signs – temperature
4. Vital signs – pulse
5. Vital signs – respiration
6. Vital signs – pulse oximetry
7. Sterile & Medical Aseptic technique
8. Assisted patient transfer
9. Care of patient medical equipment
10. Venipuncture

### **Semester Minimums for Clinical Competencies**

**Semester 1: 3 competencies**

**Semester 2: 10 competencies**

**Semester 3: 12 competencies**

**Semester 4: 14 competencies**

**5: 12 competencies**

## CLINICAL GRADES

Clinical grades are based upon the following factors: competencies, clinical orientations, modality and transporter evaluations, student performance evaluations, and deductions outlined in this handbook.

1. Clinical competencies are worth 100 points each. Clinical competencies are averaged for the semester. Students are responsible for keeping track of all competencies and are encouraged to make copies of completed competencies before turning the original forms in to the Clinical Coordinator.
2. Students' behavior at the clinical sites will be evaluated on a continuing basis. Near the end of a student's clinical rotation, the Clinical Instructor will complete a student performance evaluation on Trajecsys. These evaluations may be reviewed by the student and if necessary, discussed between the student and the Clinical Coordinator. The evaluations are a portion of the student's clinical grade. The scores for all rotations in a semester are averaged, and that average is added to the clinical competencies grade for the semester.

Example:

A. Sally Student has four competencies for semester one:

Chest	95%
Hand	97%
Abdomen	94%

These competencies averaged = 95%

B. Sally's clinical student performance evaluations for semester one:

98%

95%

93%

These clinical student performance evaluations averaged = 95%

C. Calculation of Sally's clinical grade:

95 Average of competencies

95 Average of student performance evaluations

190 Total points out of 200 points possible = 95%

- 6 percentage points for deductions = 89% final clinical grade

D. Deductions from the clinical grade will be taken for various reasons outlined in the handbook.

\* Clinical grades will be completed by the Clinical Coordinator.

\* Students may request a conference with the Clinical Coordinator during the semester for discussion of clinical grades.

## CLINICAL DEDUCTIONS

*Clinical deductions include, but may not be limited to, the following:*

Using cell phone in the clinical setting	-1%
Not clocking in/out at clinics	-1%
Clocking in/out at the incorrect clinical location	-1%
Clocking in/out for another student	-1%
Failure to have markers at clinics, or using another person's markers	-1%
No call or late call to clinic site when missing clinics	-1%
No call or late call to program when missing clinics	-1%
No call to program when leaving early from clinics or arriving late to clinics	-1%
No clinical binder at clinics	-1%
No mini spiral notebook book at clinics or little to no information in mini clinical book	-1%
Failure to turn in dosimeter report on due date	-2%
Failure to turn in dosimeter report each additional class day after due date	-1%
Not wearing dosimeter at clinics	-1%
Lost dosimeter	-2%
Late Clinical Orientation sheet, Late Transporter, or Modality Objectives	-3%
Long hair down at clinics	-1%
Wearing more than one earring per ear or large earrings (exceeding 5 mm in diameter)	-1%
Wearing nose ring	-1%
Wearing tongue ring	-1%
Wearing hoop earrings	-1%
Wearing unapproved shoes at clinics (sandals, open-toe shoes, clogs, etc.)	-1%
Visible tattoos	-1%
Wearing artificial or acrylic overlay fingernails	-1%
Wearing hospital scrubs when student is not on the OR / portable rotation.	-1%
Wearing unapproved scrubs	-1%
Wearing unapproved jacket (fleece, sweatshirt) over uniform	-1%
Wearing shirts or pants other than scrub shirts or pants at clinics (ex: wearing a T-shirt instead of a scrub top)	-1%

**STATE TECHNICAL COLLEGE OF MISSOURI  
MEDICAL RADIOLOGIC TECHNOLOGY PROGRAM**

**SAMPLE CLINICAL GRADE FORM**

**SEMESTER ONE**

Student: \_\_\_\_\_

Average Clinical Student Performance Evaluations..... 95

Semester One Competencies: See attached  
Average Competency Score..... 97

Subtotal ..... 96

Total Deductions..... -8

Deductions:

- |  |   |
|--|---|
| 1. Lost dosimeter                                | 2 |
| 2. Hair down on...                               | 1 |
| 3. Wearing fleece jacket                         | 1 |
| 4. Wearing large hoop earrings                   | 1 |
| 5. No clocking out at clinics on...              | 1 |
| 6. No call to program when missing clinics on... | 1 |
| 7. Cell phone usage at clinics on...             | 1 |

Final Clinical Grade.....88 – B

Comments:



**STATE TECHNICAL COLLEGE of MISSOURI  
MEDICAL RADIOLOGIC TECHNOLOGY PROGRAM  
SAMPLE STUDENT PERFORMANCE EVALUATION**

Student \_\_\_\_\_

Semester (ex: FA22) \_\_\_\_\_

Facility \_\_\_\_\_

Date \_\_\_\_\_

**Please rate the student's performance based on the following scale:**

**N – Never / Unacceptable (3.5)**

**AA – Almost Always / Above Average (4.75)**

**R – Rarely / Needs improvement (4)**

**A – Always / Exceptional (5)**

**S – Sometimes / Average (4.25)**

The radiologic technology student:

1.	Adheres to the school dress code, wears his/her dosimeter, and practices good personal hygiene.	N	R	S	AA	A
2.	Is on time for clinics; notifies the clinic in a timely manner if he/she is going to be late or absent; brings his/her clinical binder.	N	R	S	AA	A
3.	Returns promptly from breaks/lunch.	N	R	S	AA	A
4.	Uses his/her time effectively.	N	R	S	AA	A
5.	Keeps exam rooms clean, orderly and stocked.	N	R	S	AA	A
6.	Demonstrates good patient care; protects patient modesty and privacy.	N	R	S	AA	A
7.	Checks patient ID prior to performing exams.	N	R	S	AA	A
8.	Refers to patients by their proper names.	N	R	S	AA	A
9.	Follows through to complete exams that are started.	N	R	S	AA	A
10.	Utilizes proper body mechanics when moving/lifting patients and equipment.	N	R	S	AA	A
11.	Follows radiation safety practices, including shielding patients, personnel and other individuals.	N	R	S	AA	A
12.	Continues to show improvement in exam performance and technique selection.	N	R	S	AA	A
13.	Uses critical thinking when performing exams, especially challenging or unfamiliar exams.	N	R	S	AA	A

14.	Demonstrates ability to work with all equipment with ease (including CR, processor and x-ray equipment).	N	R	S	AA	A
15.	Communicates effectively with patients, staff & fellow students.	N	R	S	AA	A
16.	Cooperates and works well with staff and fellow students; offers to help others.	N	R	S	AA	A
17.	Follows instructions and accepts constructive criticism with a positive attitude.	N	R	S	AA	A
18.	Demonstrates interest in exams being performed; volunteers to perform exams, including unfamiliar or difficult exams.	N	R	S	AA	A
19.	Expresses a desire to learn.	N	R	S	AA	A
20.	Has a good attitude and does not become easily discouraged.	N	R	S	AA	A

**Comments from Clinical Instructor:**

**\*Will be completed in Trajecsyst by clinical instructors following most rotations.**

## **ACCIDENTS**

When a student is involved in an accident inside a clinical education center, he/she must follow that facility's policies and procedures for the immediate situation at hand. The Clinical Instructor at the facility and the Program Director must be notified immediately. Human Resources at the College will be notified within 24 hours and an incident report will be completed. Additional procedures will be followed according to guidelines provided by HR that comply with the College's professional liability insurance policy.

## **BODY FLUID EXPOSURE**

Students must wear appropriate protective equipment when performing any tasks that may involve exposure to blood or body fluids. All blood or body fluids shall be considered potentially infectious. In the event that a student's skin has been punctured with a contaminated needle at the clinical education center, the following steps should be taken in accordance with the infection control department at the facility:

1. Immediately wash the punctured area with soap and water.
2. Notify a Clinical Instructor. If one is not in the immediate area, notify another technologist.
3. See the infection control nurse at the facility where the incident occurred. Medical care and follow-up of the incident will be implemented according to the facility's policies.
4. The MRT Program Director must be notified within 24 hours. An incident report will be completed at the College and Human Resources will be notified. Additional procedures will be followed according to guidelines provided by HR that comply with the College's professional liability insurance policy.
5. The student has the right to refuse testing and follow-up and must sign a waiver indicating refusal in the presence of a witness.

In the event the student's skin is punctured with a contaminated needle in the lab setting at the College (ex: during venipuncture lab), the following procedure will be implemented:

1. Immediately wash the punctured area with soap and water.
2. Notify an MRT instructor immediately. The Program Director must be notified within 24 hours if he/she is not immediately available.
3. Notify Human Resources immediately and fill out an incident report.
4. The student will be directed to see his/her physician for blood testing and follow-up care.
5. The student may go to an Emergency Room for blood testing at his/her own expense.
6. The student has the right to refuse testing and follow-up and must sign a waiver indicating refusal in the presence of a witness.
8. Additional procedures will be followed according to guidelines provided by HR that comply with the College's professional liability insurance policy.

## **CLINICAL UNIFORM**

Students will purchase scrubs according to guidelines set by the MRT program to ensure all scrubs are of the same style and color. The school uniform must be purchased through the State Tech Bookstore. Each student must have 3 white scrub tops and 3 navy scrub bottoms. Students are encouraged to try scrubs on at the bookstore to make sure they fit appropriately before ordering. Scrubs should not be tight/form-fitting, nor should they be too loose/baggy. Pants should not drag on the ground when shoes are worn and should be worn around the natural waist. Uniforms must be clean and wrinkle-free. Shoes must be clean and free from excessive dirt.

In addition to the appropriate scrub tops and pants, the student must wear the following:

- Name tag on retractable “State Tech” badge holder
- Dosimeter
- Primarily white, black, or gray tennis shoes (no sandals, open-toe shoes, or clogs)

Students are permitted to wear a long-sleeved solid color shirt under the scrub top, or may wear a program-approved warm-up jacket over the scrub top (available at the State Tech Bookstore). Other jackets, hoodies, or sweatshirts are not allowed.

Student scrub tops that display the State Tech logo may not be worn during the performance of paid student technologist jobs.

Personal and oral hygiene are essential. Hair and nails must be kept clean. Men must keep beards and mustaches trimmed. Long hair must be pulled back, off the collar, and out of the face at all times. Wearing artificial or acrylic overlay fingernails is prohibited. Avoid excessive makeup and strong perfumes/fragrances. Acceptable jewelry is limited to one ring per hand and a watch worn on the wrist. Earrings are limited to one small earring per lower ear lobe and should not be “hoop” or “dangly” earrings. Jewelry associated with body piercing, with the exception of ear lobes, is not allowed (examples include, but are not limited to, tongue, nose, and tragus piercings). All tattoos on exposed skin must be covered. Any student found not to follow this policy will have 1% point deducted from their affective clinical grade for each occurrence. Repeated violations of this policy may result in separation from the MRT program.

### **CLINICAL BINDER**

Students must keep a binder/notebook of all techniques and procedures as learned in the classroom environment. **This book must be kept with the student during clinicals at all times.** Students not in compliance with this policy will have 1% point deducted from their clinical grade for each occurrence.

### **CLINICAL NOTEBOOK**

Students must keep a small clinical notebook of protocols, techniques, etc. learned for each clinical site. **This book must be kept with the student during clinicals at all times.** Students not in compliance with this policy will have 1% point deducted from their clinical grade for each occurrence. A mini spiral notebook is included on a list of required MRT supplies and should be purchased through the State Tech bookstore.

### **CLINICAL ORIENTATION & EVALUATION FORMS**

During the first year, students will receive clinical orientation sheets to be filled out by the Clinical Instructor as they rotate through some clinic sites for the first time. They will also complete one (1) Patient Transportation rotation at CRMC, for which the supervisor must complete an evaluation form. It is the student’s responsibility to turn in orientation sheets and evaluation forms to the Clinical Coordinator. They are due within one week after the student completes the rotation. Failure to turn it in within one week will result in a 3% deduction from the final clinical grade. Failure to turn in these sheets within 4 weeks of the rotation will result in a grade of 0 for the rotation, in addition to the 3% deduction from the final clinical grade.

During the second year, students will rotate through specialty/modality areas. Specific objective sheets must be completed in order to complete clinical education. Objective sheets must be turned in immediately following completion of each rotation. It is the student’s responsibility to complete the objective sheet and turn in the sheet to the Clinical Coordinator within one week of completion of the specialty rotation. Failure to turn in the objective sheet will result in a 3% deduction of the clinical grade for the semester. Failure to

turn in any objective sheet within 4 weeks of completion of that rotation will result in a 0 (zero) for that rotation and a 3% deduction off of the clinical grade for the semester.

### **CONFLICT OF INTEREST POLICY**

Consideration of personal gain must not influence the decisions or actions of students, staff technologists, or clinical instructors. Students with conflicts of interest must inform the Program Director immediately.

Examples include, but are not limited to:

- Family member employed as staff technologist or clinical instructor
- Family member of a significant other employed as staff technologist or clinical instructor
- Significant other (ex: boyfriend, girlfriend, or spouse) employed as staff technologist or clinical instructor

Failure to follow the Student Employment and/or Conflict of Interest Policy may result in, but are not limited to, the following:

- Repeating previously completed coupons and competencies
- Altered clinical schedule
- Possible separation from the program

### **HIPAA PRIVACY**

Federal regulations, known as the Health Insurance Portability and Accountability Act (HIPAA) prohibit the use and disclosure of protected health information without permission from the patient. Students will complete HIPAA training to comply with Clinical Education Center policies. Violation of HIPAA may result in permanent separation from the MRT program.

### **HOSPITAL SCRUBS**

Hospital scrubs are not to be worn unless the student is on the OR / Portable clinical rotation. Scrubs are hospital property and must not be worn into or out of any clinical education center. Dosimeters and name tags are to be worn when wearing hospital scrubs. Failure to comply with this policy will result in a 1%-point deduction from the student's grade for each occurrence.

### **MAGNETIC RESONANCE IMAGING (MRI) SAFETY**

Metal objects can become dangerous airborne projectiles in the MR environment. Most accidents that occur in MR are due to a lack of knowledge about the potential hazards; therefore, the MRT program has established a safety protocol for students who will have access to the MR environment. Prior to entering the clinical setting, all students will receive MR safety training, which includes an informational video and written assessment. Each student will fill out an MR environment screening form and answer questions regarding the possibility of having hazardous implants, devices, or objects on or within the body. This screening process will ensure student safety in the MR environment. The signed screening form will be kept on file (with either the clinical facility or the program) for every student. Furthermore, students must report any activity (such as trauma, surgery, or other procedure) in which a metallic, electronic, magnetic or mechanical implant, device or object may have been introduced into or onto the student. This should be reported to the MRT Program Director and MR supervisor prior to participating in clinical rotations so the proper screening process can take place. **Remember, the magnet is ALWAYS ON!**

## **MODALITY ROTATIONS**

During their second year in the program, students may rotate through modality areas. Students who are behind on their clinical competency requirements may not be scheduled in modality areas. Students do not earn competencies while in modality rotations. Modality rotations may include:

- Computed Tomography
- Magnetic Resonance Imaging
- Radiation Therapy
- Mammography
- Cardiac Cath Lab
- Interventional Radiology
- Nuclear Medicine
- Ultrasound

Equitable learning opportunities will be provided to all MRT students. While MRT program faculty will not prohibit male students from participating in mammography rotations, the male student should know that his participation in such clinical rotations may be prohibited by policies established by the clinical education centers. Placement of a male MRT student in a mammography rotation is not guaranteed and is very unlikely, due to policies in place by the clinical education centers.

## **N95 MASKS**

MRT students are not fitted for N95 respirators. Therefore, MRT students shall not participate in the care of a patient under transmission-based precautions that require the healthcare provider to don an N95 respirator. This includes patients who are on airborne precautions because they have a positive tuberculosis (TB) or COVID diagnosis.

The MRT program's policy is that MRT students are allowed to care for COVID-positive patients *unless*:

1. providing care for the patient will require the student to don an N95 respirator.
2. the patient is undergoing an aerosol generating procedure (AGP).
  - a. AGPs are more likely to generate higher concentrations of infectious respiratory aerosols than coughing, sneezing, talking, or breathing, which increases the student's risk for pathogen exposure and infection. (Source: CDC)
  - b. AGPs include, but may not be limited to:
    - i. Open airway suction
    - ii. Sputum induction
    - iii. CPR
    - iv. Endotracheal intubation and extubation
    - v. Non-invasive ventilation (ex: BiPAP, CPAP)
    - vi. Bronchoscopy
    - vii. Manual Ventilation (Source: CDC)
3. the clinical education center's policies prevent students from participating in healthcare delivery for COVID-positive patients.

## **RADIATION EXPOSURE MONITORING**

Each student will be assigned a dosimeter to monitor their radiation exposure. Dosimeters are part of the clinical uniform and must be worn at the level of the collar. When wearing a lead apron, the student must wear the dosimeter outside the lead apron.

Students not wearing their dosimeters will have 1% point deducted from the clinical grade for each occurrence. In addition, the student may be sent home or placed in a non-radiation area for that day. Losing a dosimeter will result in 2% points deducted from the clinical grade for each occurrence. If a student loses his/her dosimeter, he/she must notify the Program Director immediately in order for a replacement dosimeter to be ordered. A Lost Dosimeter Form must be completed (pg. 44). The student's clinical rotation may be altered until a replacement dosimeter can be obtained. If a student loses his/her dosimeter, he/she will be responsible for the replacement cost.

Students are responsible for turning in their dosimeters to the Program Director on a quarterly basis so they may be returned for read out. The quarterly due date will be set by MRT faculty and made known to the students in advance. Failure to return the dosimeter by the deadline will result in a 2% deduction from the student's clinical grade. In addition, the student may not attend clinical rotations until the dosimeter is received. An additional 1% will be deducted for each additional day that the dosimeter is not returned. A new dosimeter will be issued once the old one is received.

The program has established a quarterly investigation level of 100 mrem. This level is well below the 5rem allowed per year by the NCRP (Report No. 116). If a student receives 100 mrem or more of radiation exposure in any given quarter, he/she will be counseled by MRT faculty regarding the risks associated with increased exposure levels. Documentation of the counseling session, level of exposure, and clinical education site will be completed (see page 43). Frequency of patterns will be monitored by program faculty; students and clinical education centers will be advised accordingly. Preventive measures may be taken to reduce high exposures. Subsequent recurrences may require the student to be removed from high exposure areas and counseled by the Program Director and a Radiation Safety Officer.

Student may request a dosimetry report from the Program Director. Requests for dosimetry reports from graduates' employers must be in writing and authorized (signed) by the graduate.

### **SOILED UNIFORM GUIDELINES**

If an MRT student's uniform becomes saturated with a patient's body fluids, it is the student's responsibility to immediately notify their clinical instructor. The student should change into a clean uniform. It is recommended that students keep a second uniform in their car. If a second clinical uniform is not available, it is the student's responsibility to obtain scrubs from the facility, if available.

### **STUDENT EMPLOYMENT POLICY**

Students employed by clinical sites or other health care facilities must sign the Student Employment Agreement which will be placed in their student files.

The following regulations apply to student employment in radiology departments:

- Competencies may only be earned during clinical hours.
- Dosimeters issued by the program are to be worn only during clinical hours. The employer must provide a separate dosimeter to be worn during work hours.
- Students are not dismissed from clinical schedules or rotations to work for pay.
- Students are covered by State Tech insurance policies only when performing State Tech clinical assignments.
- Students must remove their State Tech clinical uniform when working or volunteering. Students may not wear their employer's uniform during clinical hours.

## **STUDENT POSITIONING & RADIATION EXPOSURE**

Students may practice positioning on other students, instructors, and radiologic technologists. Students may not make radiation exposures on another student, instructor or technologist while practicing, as this practice is a radiation safety hazard. Exposures will be made on anthropomorphic phantoms in the classroom lab, and exposures will be made on patients at facilities under the supervision of qualified registered technologists. Students must not hold image receptors during any radiographic procedure. Students must not hold patients during any radiographic procedure and should utilize immobilization devices/methods as the appropriate standard of care.

## **TRAJECSYS**

The student will use the cloud-based record keeping system, *Trajecsys*, for clocking in and out at clinical sites. This system will also be used to track student coupons, competencies, evaluations, and other documents as required by the MRT program faculty. The student will register for *Trajecsys* during their first semester; payment will be required at the time of registration. This one-time registration will allow the student to utilize *Trajecsys* for required clinical activities for the entire length of the program.

Students are expected to clock themselves in and out at the clinical site at the proper time. Failure to clock in or out will result in one percentage point deducted from the clinical grade for each occurrence. Clinical Instructors (or other radiologic technologists) may be asked to verify students' clinical time. It is unacceptable to clock in and/or out for another student or to clock in/out from one's cell phone.

## **VENIPUNCTURE**

Proper training in venipuncture technique is essential and could cause damage to the patient if performed incorrectly. Students will learn and practice appropriate techniques and sterile procedures related to venipuncture during the MRT curriculum. Students will only practice on other students at this time, under direct supervision of the instructor. Students will not practice venipuncture on patients.

Students may inject contrast media into a patient only under direct supervision of a registered Radiologic Technologist. The IV line must be started by a registered Radiologic Technologist, nurse or physician.

## **X-RAY MARKERS**

Students will purchase plastic embedded x-ray markers through the State Tech Bookstore at the beginning of the program. It is the student's responsibility to utilize these markers at the clinical site. Failure to have markers during the clinical rotation, or using another person's markers, will result in 1% point deducted from the clinical grade for each occurrence. Students are responsible for replacing lost markers at their own expense.



## PREGNANCY POLICY

It is accepted that the human embryo-fetus is particularly sensitive to radiation exposure, especially during the first trimester of pregnancy. However, a student who becomes pregnant may continue to perform the duties of a radiology technology student without interruption if established radiation safety practices are followed.

An MRT student who becomes pregnant may voluntarily declare her pregnancy to the Program Director. All declarations must be in writing. Once the declaration has been received, the Program Director will officially recognize the pregnancy. A counseling session will ensue between the Program Director and student. The student will sign a form acknowledging she has received counseling and understands the practices to be followed in order to ensure the safety of the embryo-fetus.

Following the counseling session, the student will select one of the following options:

1. The student will continue in the program without modification.
2. The student will continue in the program with clinical rotation restrictions. The pregnant student will not participate in fluoroscopic procedures, portable procedures, surgical procedures, or procedures involving radiation-implant patients. Substitute clinical rotations will not be provided. All clinical rotations missed by the student must be made up when the student returns from medical leave after her pregnancy, or at the end of the program, which may result in a delay in program completion.
3. The pregnant student will withdraw from the program for an indefinite period of time. If she wishes to be reinstated, she must communicate with the Program Director in advance so adequate plans can be made for her return. Previous course work will be reevaluated at the time of readmission to assure that competency has been maintained.

Regardless of the option chosen, the student must complete all program requirements in order to graduate.

A student who has declared her pregnancy will be issued a secondary dosimeter, at the student's expense, that will monitor the monthly equivalent dose (EqD) to the embryo-fetus. This dosimeter must be attached at the level of the waist (under a lead protective apron, when appropriate) during all radiologic procedures. The secondary dosimeter will ensure the monthly EqD does not exceed 50 mrem or 500 mrem for the entire pregnancy (NCRP Report No. 116). If the monthly EqD reaches 20 mrem or the total EqD reaches 200 mrem, additional counseling will be provided and clinical rotation restrictions will be enforced. In the event that exposure limits are exceeded, the student shall be removed from clinical rotations involving any ionizing radiation and energized x-ray lab activities for the remainder of the declared pregnancy. It is the student's responsibility to check the dosimeter reports and provide the Program Director with a copy of the report. The student and Program Director will initial the dosimeter reports monthly to verify they have checked the total EqD; a copy will be kept in the student's file.

A student may, at any time, choose to retract her declaration of pregnancy and continue in the clinical environment without any clinical rotation restrictions. All retractions must be in writing and given to the Program Director.

**CLINICAL SITE CONTACT LIST**

<b>CLINICAL SITE</b>	<b>PHONE NUMBER</b>	<b>CONTACTS</b>
Boone Hospital Center 1600 E. Broadway Columbia, MO 65201	573.815.3701 573.815.3719	Megan Newlin (Manager) TJ Hendren (CI) Kim Lowenberg (CI) Amanda Koetting (CI)
Capital Region Medical Center 1125 Madison St. Jefferson City, MO 65101	573.632.5269	Vanessa Post (Manager) Tori Adrian (CI) Jim Pfautsch (CI) Kassity Kuttenkuler (CI) Lauren Carender (CI)
Goldschmidt Cancer & Imaging Center 1432 Southwest Blvd. Jefferson City, MO 65109	573.632.4805	Lorie Nutt (CI)
Hannibal Regional Hospital 6000 Hospital Dr. Hannibal, MO 63401	573.248.5303	Jennifer Akers (Director) Amber Ethen (CI) Debra Flavell (CI) Corene Parson (CI) Taylor Goodwin (CI)
Jefferson City Medical Group (JCMG) 1241 W. Stadium Blvd. Jefferson City, MO 65109	573.556.7755	Jason Caton (Manager) Heather Doyle (CI)
Mercy Hospital 901 E. Fifth St. Washington, MO 63090	636.239.8258	Danielle Amann (Supervisor/CI) Jackie Wesselschmidt (CI)
Mercy Medical Building South 901 Patients First Drive Washington, MO 63090	636.390.1593	Danielle Amann (Supervisor/CI) Denise Derner (CI)
Missouri Orthopedic Institute (MOI) 1100 Virginia Ave. Columbia, MO 65201	573.884.1423 573.882.2301	Melissa Sommerer (Supervisor/CI) Mark Brekke (CI) Kala Schmitter (CI)
University of Missouri Hospital 1 Hospital Dr. Columbia, MO 65201	573.771.7803 573.882.8535	Veronica Eitel (Manager) Madison Davenport (CI) Makayla Tallman (CI)



## High Dosimetry Exposure Report Form

**Student Name:** \_\_\_\_\_ **Student ID:** \_\_\_\_\_

The program has established a quarterly investigation level of 100 mrem. This level is far below the 5rem allowed per year by the NCRP. In the event that a student receives 100 mrem or more of radiation exposure in any given quarter, they will be advised and counseled regarding their radiation safety habits. Attempts will be made to determine if they are using unsafe radiation practices by looking at the types of exams they are performing, areas they are rotating through and safety measures being utilized. Documentation of the counseling session, level of exposure and clinical site will be completed.

Exposure Period	Exposure Level			Clinical Education Center
	Deep	Eye	Shallow	

**Student Input:** This narrative includes information that could explain reasons for high dosimetry exposure (ex: clinical areas through which the student has rotated, exams that were done, etc.).

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**Plan of Action:** The student should implement the following recommendations for corrective actions.

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**The student was counseled to practice the cardinal principles of time, distance and shielding.**

Program Director \_\_\_\_\_ Date \_\_\_\_\_

Student \_\_\_\_\_ Date \_\_\_\_\_



## LOST DOSIMETER FORM

**Student Name:** \_\_\_\_\_ **Student ID:** \_\_\_\_\_

**Radiation Monitoring Service:** \_\_\_\_\_

**Type of Badge:** \_\_\_\_\_

**Beginning wear date:** \_\_\_\_ / \_\_\_\_ / \_\_\_\_

**Date badge was presumed lost:** \_\_\_\_ / \_\_\_\_ / \_\_\_\_

**# of clinical days between wear date & date presumed lost:** \_\_\_\_\_

**# of days in clinical setting without dosimeter after reporting lost:** \_\_\_\_\_

**# of days in clinical setting without dosimeter:** \_\_\_\_\_

**Clinical site(s) attended during wear date:** \_\_\_\_\_

\_\_\_\_\_

**Actions taken:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Other information, if applicable:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*I, \_\_\_\_\_, assure that I followed the ALARA concepts of time, distance, and shielding while in the clinical setting, both prior to and after discovering my radiation dosimeter was missing. Once I discovered my dosimeter was missing, I did not participate in high radiation exams, including surgical cases, fluoroscopy, or mobile imaging. I was not in exam rooms during radiation exposures.*

**Student Signature / Date:** \_\_\_\_\_

**Program Director Signature / Date:** \_\_\_\_\_



## Student Employment Agreement

I, \_\_\_\_\_, understand that my employment at \_\_\_\_\_ cannot interfere with my training at State Technical College of Missouri's Medical Radiologic Technology Program. I know that I cannot obtain competencies while I'm being paid by my employer. I realize that my school radiation dosimeter is only to be worn during assigned clinical hours and that during paid work hours I must wear a dosimeter provided by my employer. I am aware that my school uniform is to be worn during clinical hours and cannot be replaced by my employer's work uniform. In addition, I understand that I may not wear my school scrub top (which displays the State Tech logo) during paid working hours. I understand that insurance policies provided by the school are in effect only during assigned school hours and not during paid work hours.

Student Signature \_\_\_\_\_

Date \_\_\_\_\_

Program Director  
Signature \_\_\_\_\_

Date \_\_\_\_\_



## Student Laboratory Participation Agreement

I, \_\_\_\_\_,  
understand I will role play as professional radiographer and patient during laboratory experiences. I am  
expected to manipulate radiographic equipment and have physical contact with other students while learning  
various radiographic procedures, measuring vital signs, and practicing venipuncture.

Student signature: \_\_\_\_\_

Date: \_\_\_\_\_



## CLINICAL INFECTION CONTROL COMPLIANCE AGREEMENT

I, \_\_\_\_\_:

Print Name

- understand participation in clinical education carries inherent risk of exposure to infectious diseases, which may include, but are not limited to, seasonal flu, COVID-19, Tuberculosis (TB), Methicillin-resistant Staphylococcus aureus (MRSA), and clostridium difficile (C-diff.).
- understand clinical education is an essential component of my professional education that cannot be replaced with laboratory experiences, virtual simulations, or other remote experiences.
- will complete instruction in infection control practices and the use of PPE prior to clinical placement.
- agree to follow safe infection control practices in the clinical setting and to adhere to any additional safety guidelines, policies, and procedures established by clinical education centers and my professional program. I understand that failure to follow these guidelines may result in dismissal from a clinical site.
- understand following these procedures and guidelines does not eliminate the risk of contracting these diseases and only reduces the probability of transmission to myself and others.

I have read the above guidelines and agree to being placed into clinical settings at this time.

I have read the above guidelines and DO NOT agree to being placed into clinical settings at this time. In accordance with the program's accreditor, I understand that I may not graduate on time and/or may need to forfeit my position in the program.

Student Signature \_\_\_\_\_

Date \_\_\_\_\_



## **Student Handbook Policies and Procedures Agreement 2023-2024**

This agreement will be placed in your file as evidence that you have received and read the State Technical College of Missouri Medical Radiologic Technology Program Student Handbook of Policies and Procedures, and that you will abide by the policies as outlined in the student handbook.

Please sign, date, and return to the Program Director.

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Student PRINTED Name

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Student Signature

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Date