Midwestern State University
BSRT – Entry Level Program
Part I: Academic Handbook
2024
(Graduates of 2026)

Midwestern State University

Robert D. and Carol Gunn College of Health Sciences and Human Services

The Shimadzu School of Radiologic Sciences

Bachelor of Science in Radiologic Technology Program

STUDENT HANDBOOK

Reviewed and Revised: August 2023 Updated: October 2023

Note: This handbook is for use by students in the Bachelor of Science in Radiologic Technology Program and contains specific information about the Radiologic Technology Program. For general MSU policies, see the MSU student handbook and catalog.

The information in this handbook is current at the time it is posted. However, this manual may be revised or amended upon written notification to the student. No revision or amendment will be retroactive but will become effective upon the date of student notification. The Chair of Radiologic Sciences will make the final interpretation of program policies and procedures.

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INTRODUCTION

Purpose of the Radiologic Technology Program

The Radiologic Technology Program is designed to develop the technical skills and knowledge necessary for the student to satisfactorily function in the role of a radiologic technologist. The program seeks to provide pertinent learning experiences which will enable the student to demonstrate competency in the technical aspect of the profession as well as the human relations aspect. The program further seeks to develop the students' interests in the professional societies as well as the possibilities for continuing education.

The Radiologic Technology Program is twenty-nine months in duration after completing the prerequisites. During this two-and-a-half year period, the student will receive didactic experience at the University, combined with clinical experience at the affiliated hospitals and clinical sites. The student can earn a Bachelor of Science after satisfactorily completing the appropriate curriculum. Upon satisfactory completion of the radiologic science curriculum and prerequisites, the student is eligible to sit for the national registry examination for radiologic technologists sponsored by the American Registry of Radiologic Technologists (ARRT).

A variety of assessment methods are used to determine if the student is achieving the goals of the program. Some of these include tests, laboratory exercises, projects, assignments, student demonstrations, image critiques, observation, and performance evaluations.

The radiologic technologist is one of many individuals who work together as a team to meet the needs of the medical community and society by providing patients with the best possible care. Because of the rapid growth of the medical field, there is an ever-increasing need for radiologic technologists.

Program Philosophy

Midwestern State University's Radiologic Technology Program was designed with the philosophy that the most effective way to prepare graduates to enter the Radiologic Sciences profession is a progression from theory in the classroom to guided practice in the laboratory to "real-world" application in the clinical environment. The spring semester of the second year and the fall & spring semesters of the third year are devoted to on-campus classes and energized laboratories. As students enter the summer term of the third year, the focus changes to clinical experiences and some online courses. The clinical environment reinforces technological, patient care, and professional skills.

Mission, Goals, and Student Learning Outcomes

Bachelor of Science in Radiologic Technology Mission Statement

The Bachelor of Science in Radiologic Technology program at Midwestern State University uses a multifaceted approach to prepare students to become competent and compassionate radiologic technologists who demonstrate personal and professional growth as part of a dynamic health care team.

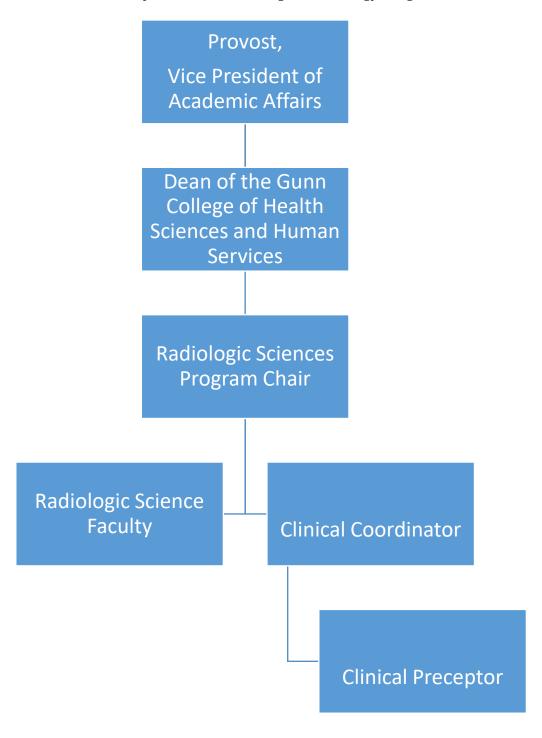
Program Goals and Student Learning Outcomes

GOALS	STUDENT LEARNING OUTCOMES
Students will demonstrate	 Students will apply positioning skills.
CLINICAL COMPETENCE	Students will practice radiation protection.
Students will demonstrate	 Students will analyze radiographic images.
CRITICAL THINKING skills.	 Students will manipulate technical factors.
Students will demonstrate an	Students will demonstrate professional ethics.
understanding of	Students will demonstrate an appreciation for
PROFESSIONALISM	radiologic sciences.
Students will demonstrate effective	Students will demonstrate oral communication
COMMUNICATION skills in the	skills.
medical environment.	Students will practice written communication
	skills.

PROGRAM STRUCTURE

ORGANIZATIONAL CHART

Midwestern State University Bachelor of Science in Radiologic Technology Program



PROGRAM FACULTY

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ACCREDITATION

Regional Accreditation

The Radiologic Technology Program and Midwestern State University are regionally accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACS-COC). As summarized by the SACS-COC, "To gain or maintain accreditation with the Commission on Colleges, an institution must comply with the standards contained in the Principles of Accreditation: Foundations for Quality Enhancement and with the policies and procedures of the Commission on Colleges. The Commission on Colleges applies the requirements of its *Principles* to all applicants, candidates, and member institutions, regardless of type of institution (public, private for-profit, private not-for-profit)."

"The Southern Association of Colleges and Schools Commission on Colleges is the regional body for the accreditation of degree-granting higher education institutions in the Southern states. It serves as the common denominator of shared values and practices among the diverse institutions in Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia and Latin America and other international sites approved by the Commission on Colleges that award associate, baccalaureate, master's, or doctoral degrees. The Commission also accepts applications from other international institutions of higher education."

"When an institution has earned accreditation by the Commission on Colleges, it signifies that it has 'a purpose appropriate to higher education and has resources, programs, and services sufficient to accomplish and sustain that purpose.' In addition to ensuring that our institutions provide quality programs for students which determines eligibility for Title IV funds (student financial aid), the Commission on Colleges works to influence legislation and regulations that impact the work of our member institutions."

More information about <u>SACS-COC</u> can be found online.

Programmatic Accreditation

The BSRT Program is accredited by:

The Joint Review Committee on Education in Radiologic Technology 20 North Wacker Drive, Suite 2850 Chicago, IL 60606-3182 www.jrcert.org (312) 704-5300 or e-mail at: mail@jcert.org

Mission Statement

The Joint Review Committee on Education in Radiologic Technology (JRCERT) promotes excellence in education and elevates the quality and safety of patient care through the accreditation of educational programs in radiography, radiation therapy, magnetic resonance, and medical dosimetry.

https://www.jrcert.org/about-jrcert/

In keeping with JRCERT requirements to make program effectiveness data available to communities of interest, please see the following link:

Program Effectiveness Data

COMPLIANCE WITH JRCERT STANDARDS

Because the Radiologic Technology Program at Midwestern State University is accredited by the JRCERT, the program will strive at all times to comply with the JRCERT Standards for an Accredited Educational Program in Radiologic Sciences. If a student determines that the program is not in compliance with any standard, a complaint can be brought to the program's attention. Upon receipt of an allegation, the Radiologic Technology Program will review it to determine if the non-compliance issue exists. Within ten (10) days after receiving the complaint, a meeting will be scheduled with the individual filing the allegation to discuss the complaint. If the complaint is legitimate, the program faculty will develop a plan to resolve the issue and bring the program into compliance. If the party filing the complaint is not satisfied with the results, a meeting will be scheduled with the Program Chair to determine if non-compliance still exists. This meeting will be scheduled within twenty (20) days of the original meeting. If the Program Chair determines non-compliance is still present, a plan will be drafted to solve the non-compliance issue. If the results of this meeting are still unsatisfactory to the party filing the complaint, a meeting can be scheduled with the Dean of the college and/or the JRCERT.

Standards for Accreditation

This Program meets or exceeds the "Standards for an Accredited Educational Program in Radiography" (Standards) as published by the Joint Review Committee on Education in Radiologic Technology (JRCERT). These Standards may be found in whole by following the link above. Students may request an individual copy of the Standards from the Program Chair. Students have the right to report program infractions of the Standards to the JRCERT.

Inspection of all accreditation documents is available through the Program Chair or Undergraduate Coordinator. The JRCERT is dedicated to excellence in education and to quality and safety of patient care through educational programs in radiation and imaging sciences.

The JRCERT is recognized by the United States Department of Education to accredit educational programs in radiography and radiation therapy. The JRCERT awards accreditation to programs demonstrating substantial compliance with these standards.

There are established standards a program must comply with to achieve accreditation.

The Standards for an Accredited Educational Program in Radiologic Sciences (JRCERT, 2021) are as follows:

Standard One, Accountability, Fair Practices, and Public Information: The sponsoring institution and program promote accountability and fair practices in relation to students, faculty,

and the public. Policies and procedures of the sponsoring institution and program must support the rights of students and faculty, be well-defined, written, and readily available.

Standard Two, Institutional Commitment and Resources: The sponsoring institution demonstrates a sound financial commitment to the program by assuring sufficient academic, fiscal, personnel, and physical resources to achieve the program's mission.

Standard Three, Faculty and Staff: The sponsoring institution provides the program adequate and qualified faculty that enable the program to meet its mission and promote student learning.

Standard Four, Curriculum and Academic Practices: The program's curriculum and academic practices prepare students for professional practice.

Standard Five, Health and Safety: The sponsoring institution and program have policies and procedures that promote the health, safety, and optimal use of radiation for students, patients, and the public.

Standard Six, Programmatic Effectiveness and Assessment: Using Data for Sustained Improvement: The extent of a program's effectiveness is linked to the ability to meet its mission, goals, and student learning outcomes. A systematic, ongoing assessment process provides credible evidence that enables analysis and critical discussions to foster ongoing program improvement.

Students have the right to report program infractions of the standards to the JRCERT.

ASRT Medical Imaging and Radiation Therapy Scope of Practice

Scopes of practice delineate the parameters of practice and identify the boundaries for practice. A comprehensive procedure list for the medical imaging and radiation therapy professional is impractical because clinical activities vary by the practice needs and expertise of the individual. As medical imaging and radiation therapy professionals gain more experience, knowledge and clinical competence, the clinical activities may evolve. The scope of practice of the medical imaging and radiation therapy professional includes:

- Administering medications enterally, parenterally, through new or existing vascular or through other routes as prescribed by a licensed practitioner.*†
- Administering medications with an infusion pump or power injector as prescribed by a licensed practitioner.*†
- Applying principles of ALARA to minimize exposure to patient, self and others.
- Applying principles of patient safety during all aspects of patient care.
- Assisting in maintaining medical records while respecting confidentiality and established policy.
- Corroborating a patient's clinical history with the procedure and ensuring information is documented and available for use by a licensed practitioner. Educating and monitoring students and other health care providers.*

- Evaluating images for proper positioning and determining if additional images will improve the procedure or treatment outcome.
- Evaluating images for technical quality and ensuring proper identification is recorded.
- Identifying and responding to emergency situations.
- Identifying, calculating, compounding, preparing and/or administering medications as prescribed by a licensed practitioner.*†
- Performing ongoing quality assurance activities.
- Performing venipuncture as prescribed by a licensed practitioner.*†
- Postprocessing data.
- Preparing patients for procedures.
- Providing education.
- Providing input for equipment and software purchase and supply decisions when appropriate or requested.
- Providing optimal patient care.
- Receiving, relaying and documenting verbal, written and electronic orders in the patient's medical record.
- Selecting the appropriate protocol and optimizing technical factors while maximizing patient safety.
- Starting, maintaining and/or removing intravenous access as prescribed by a licensed practitioner.*†
- Verifying archival storage of data.
- Verifying informed consent for applicable procedures.

Source: American Society of Radiologic Technologists (ASRT) Practice Standards for Medical Imaging and

Radiation Therapy

Updated December 2, 2022

ASRT PRACTICE STANDARDS

The MSU Texas Shimadzu School of Radiologic Science BSRT Program values the <u>ASRT Practice Standards for Medical Imaging and Radiation Therapy</u> and expects its students and graduates to adhere to them insofar as they do not conflict with any state law or facility policy or protocol.

ARRT STANDARDS OF ETHICS

The MSU Texas Shimadzu School of Radiologic Science BSRT Program values the <u>ARRT Standards of Ethics</u> and expects its students and graduates to adhere to them insofar as they do not conflict with any state law or facility policy or protocol.

^{*} Excludes limited x-ray machine operator

[†] Excludes medical dosimetry

Radiography Program Technical Standards

The MSU radiologic technology program requires students to engage in diverse complex experiences that are reflective of essential skills and functions used in healthcare settings. These technical standards involve a combination of cognitive, sensory, affective, psychomotor, physical, and social performance skills. These technical standards ensure the safety and health of patients, students, faculty, and healthcare providers.

Students will be asked to acknowledge their ability to meet the program technical standards by signing a confirmation statement at the program's orientation. Please read the following carefully:

Standards	Description	Specific Examples
Communication	Oral and written communication skills to communicate in English with accuracy, clarity, and efficiency with patients, their families, and other members of the healthcare team, including non-verbal communication, such as interpretation of facial expressions, affect, and body language; ensures that the plan of care is understood.	 Communicate with clear dictation to patients, visitors, and other healthcare professionals Explain radiographic procedures, initiate health-teaching, document and interpret radiographic technology actions and patient/client resources Elicit information and cooperation (e.g., obtaining patient history, giving breathing instructions) Describe changes in a patient's mood, activity, and posture Perceive nonverbal communication (e.g., pain, lack of understanding) Recognize and report critical patient information to other caregivers
Critical Thinking/ Problem-Solving	Critical thinking and problem- solving skills sufficient for sound clinical judgment during the performance of radiography	 Organize and accurately perform in proper sequence, and within a specified time, the steps required for radiographic procedures Identify cause-effect relationships in clinical situations Apply information in classroom to clinical setting, adapting to patient's needs Ability to quickly assess patients' conditions and other emergent situations, determine appropriate courses of action, request assistance or delegate responsibilities to coworkers, and/or respond as needed Solve problems (e.g., mathematical computation) Comprehend three-dimensional relationships (e.g., anatomical relations) Understand the spatial relationship of structures Critical thinking/ability sufficient for clinical judgement (e.g., modification of radiographic procedures and/or technical factors to accommodate patient age/or condition
Emotional/Behavior	Emotional stability and appropriate behavior sufficient to accept responsibility/accountability for actions	 Deliver unbiased patient care Establish rapport with patients, healthcare workers, instructors and peers Ability to calmly and respectfully cope in stressful situations, emergency situations, or in situations involving other personnel Accept constructive and professional criticism Follow all program, university, and clinical site policies Maintain confidentiality at all times Adhere to the ARRT Standards of Ethics
Environmental Tolerance	Radiography students may be exposed to communicable diseases and/or blood and body fluids, toxic substances, medical preparations, latex,	 Care for patients with a communicable disease and shall provide all care using universal precautions Understand the possibility of exposure to chemicals, irritants, bodily fluids, and latex following all safety and health protection guidelines

Standards	Description	Specific Examples
	and ionizing radiation. Students shall use appropriate precautions at all times.	 Exposure to ionizing radiation is a possibility and shall follow radiation protection guidelines at all times Ability to work in a noisy environment with frequent interruptions
Communication Motor Skills	Communicate with patients, caregivers, family members, and other healthcare personnel in a manner that is clear, articulate, accurate, and ensures that the plan of care is understood.	 Communicate effectively with the patient or health care team including the ability to communicate with a patient from outside the room or with the patient facing away from you during radiographic examinations. Ability to hear, understand, and respond appropriately to comments, questions, and instructions given in person, over the phone, or from a distance including those given when personnel are wearing surgical masks. Detect and respond independently to monitoring alarms, signs of patient distress and/or a patient's communication of distress Must be able to respond to audible paging systems independently
Motor Skills	Motor abilities required for radiography include gross and fine muscular movements, equilibrium, strength, and functional use of all combined senses for the safe handling of patients, self, and equipment.	 Regularly reach up to six (6) feet off the floor Push, pull, or lift fifty (50) pounds of weight Transfer immobile patients from stretcher to radiographic table with some assistance from other personnel Push standard and oversized patient wheelchairs, as well as mobile (portable) x-ray equipment to and from various areas Standing for extended periods of time along with frequent bending and kneeling Wearing a lead apron that has an approximate weight of fifteen (15) pounds for extended periods of time (according to the NIH) Elicit information from patients by palpation, percussion, testing muscle strength and function, penetration of the skin, and other diagnostic techniques Safely perform diagnostic, therapeutic procedures and/or laboratory procedures Provide other patient services and patient associated services Safely lift, manipulate, and use equipment Manual dexterity for patient positioning and with accessory devices and equipment controls Move within confined spaces such as treatment rooms, patients' rooms, or operating rooms Administer CPR and maintain current certification
Professional Attitudes and Interpersonal Skills	Present with professional appearance and demeanor; follow instructions and safety protocols and maintain a positive attitude. Demonstrate honesty and integrity beyond reproach. Possess interpersonal abilities sufficient to interact with individuals, families, groups, etc. from a variety of social, emotional, cultural, and intellectual backgrounds.	 Allow mature, sensitive, and effective relationships with patients, healthcare workers, instructors, and peers (i.e., interpersonal skills) Maintain all professional boundaries Display flexibility and adaptations while working with diverse populations Function effectively under stress Effectively work within a team and workgroups Provide prompt and safe completion of all patient care responsibilities Exhibit ethical behaviors and exercise good judgement Display the following: Compassion Empathy Integrity Concern for others Interest and motivation
Olfactory Tolerance	Olfactory tolerance for environmental and patient odors.	Tolerate strong, unpleasant odors

Standards	Description	Specific Examples
Technological	Adaptability and skills to utilize current electronic, digital, and medical technologies.	Utilize keyboard or touchscreens for selection and inputting of clinical data into consoles, computers and charts Adapt to different technologies within the medical field, especially medical imaging
Observation	Normal or corrected visual ability sufficient for accurate observation and performance of radiography in bright, normal, or dim lighting.	 Visually monitor patients View anatomy and appropriate imaging techniques on radiographic images displayed on hard copy or computer screen, all within a low light environment Observe changes in equipment operation (e.g., warnings) Safely work in dimly lit rooms Observe and evaluate (e.g., patient's body habitus, image receptor sizes and selection of appropriate radiographic exposure factors) Skillfully use precision instruments such as microscopes, oscilloscopes, gauges, control panels, and other electronic and digital equipment Observe the results of certain stimuli (e.g., medication reaction, patient's skin color changes such as cyanosis or pallor)
Other	Adapting to Radiography Program course and clinical schedules, including any unforeseen changes	 Ability to work long and/or varied hours Tolerate physically taxing workloads Adapt to changing environments (e.g., flexible schedules)
Cognitive Ability	Cognitive ability sufficient for patient care, assessment, and operation of equipment	 Be able to concentrate and focus attention, thoughts, efforts, and behavior on patients and equipment for varying periods of time Be able to respond to patients' changing physical conditions independently Participate in intellectual activities requiring critical thinking, judgment, and analysis

This table is intended to serve as a guide regarding the physical, emotional, intellectual, and psychosocial expectations placed on a student. This document cannot include every conceivable action, task, ability, or behavior that may be expected of a student. Meeting these technical standards does not guarantee employment in this field upon graduation. Ability to meet the program's technical standards does not guarantee a student's eligibility for any licensure, certification exam, or successful completion of the degree program.

Character & Professionalism: The Affective Domain in Education

As students participate in their radiography education, they will be expected to demonstrate that they have indeed 'learned' what is required to become a professional radiographer. There are three main component areas, all important, all interrelated, into which their learning may be categorized: cognitive, psychomotor, and affective.

Students learn the facts and theories and then put them into practice. All too often, the development of what the profession considers to be the appropriate attitudes, beliefs and feelings toward what is being learned, what is being done, and how it is being done is assumed to automatically occur. A truly balanced education requires that all three component areas be attended to. In view of this necessity, awareness of how well students are progressing in their learning becomes an important component. This is accomplished by assessing one's demonstration to faculty, clinical preceptors, and staff that skills and behaviors associated with the affective category are being mastered. Since no one is capable of directly knowing someone's thoughts or feelings, the faculty can only assess affective learning by informing students of 1) what is considered to be important in this area, and 2) what observable behaviors will be looked for to evaluate the mastery of affective skills. Simply stated, the faculty will be assessing the degree to which student behaviors demonstrate the actions of what the majority of members of the radiologic technology profession, and the majority of the public, consider being indicative of professionalism. Listed below are those traits the University and Clinical faculty have identified as essential elements of affective area competency:

ACCOUNTABILITY
ADAPTABILITY & FLEXIBILITY
ASSERTIVENESS
COMPASSION
DEPENDABILITY
DILIGENCE
EFFECTIVE COMMUNICATION
EMPATHY
HONESTY & INTEGRITY
LEADERSHIP LOYALTY
RESPECT FOR OTHERS
SELF-RESPECT
TEAMWORK

Listed on the following pages are the explanations of the standards of performance that will be used in assessing the degree to which students are demonstrating that they have adopted the traits above.

ACCOUNTABILITY: To assess that students are accountable for their actions, faculty will be looking at actions exhibited which show that students:

- Develop a realistic view of their responsibilities with respect to their education
 - o Role as a student radiographer
 - o Contribution to the activities in classroom, lab, and clinic

- Precision of service in caring for patients
- Accept full personal responsibility for satisfactorily carrying out all of their areas of responsibility
- Fully and readily accept the consequences for their actions even when those actions create negative results or they fail to carry out what is expected of them
- Never need to be reminded to do what is expected of them
- Consistently identify themselves, by name and position, to a patient placed in their care, as well as to others in the clinical setting
- Recognize that the impression they are giving to the patient, staff, etc., is determined by their appearance, manner of behavior, manner of speech, and the degree of confidence with which they perform their duties

ADAPTABILITY/FLEXIBILITY: Change is a fact of life. In the healthcare professions, the need to change and adapt to the demands of the moment is common. A radiographer must be readily able and willing to change with the situation, be flexible in their expectations, and seek ways to optimize any given situation. The faculty will be looking for examples of how well, frequently, and readily students:

- Recognize when change in routine is actually required
- Correctly choose the change needed
- Refrain from complaining about change

ASSERTIVENESS: This trait is closely associated with accountability and self-respect. The faculty will be assessing student growth in this area by looking for instances where students:

- Seek out ways to take charge over one's own learning (i.e. read ahead of assigned reading schedule, do independent research, etc.)
- Actively participate in improving clinical proficiency (i.e. watching out for and trying to do as many cases as possible; attempting the more difficult as well as the easier cases)

COMPASSION & EMPATHY: It is crucial for the radiographer to keep foremost in their mind that patients are 'real people' for whom they are providing a service. The signs of student compassion and empathy the faculty will be watching for include:

- Knowing and recognizing the needs of the patient, including the patient's:
 - Need for privacy
 - o Desire to be recognized and respected
 - o Possible discomfort and/or pain
- Accurately assessing the degree of discomfort experienced by the patient
- Responding appropriately to those needs by:
 - o Acknowledging 'needs' situations
 - Selecting and implementing measures to satisfactorily meet the needs
- Ability to describe what the patient feels
- Ability to balance feelings of empathy and compassion with the necessity of performing the exam/study efficiently, accurately, and effectively
- Using professional/preferred forms of address when speaking to the patient, staff, physicians, etc.

- Assuring that your appearance, manner of behavior, and manner of speaking contribute to helping the patient feel comfortable and confident that they are receiving the best quality of care possible
- Treating all patients, staff, and fellow students equally, without regard to
 - o Race/Ethnicity
 - o Religion
 - National origin
 - Genetic information
 - o Sex
 - Gender identity
 - Sexual orientation
 - Pregnancy
 - o Age
 - Disability
 - Socioeconomic status
 - o Illness (physical and psychological)

DEPENDABILITY: Since a considerable degree of responsibility is placed on health care professionals (including students in the health-related professions), it is vitally important for the radiographer to consistently be 'ready, willing, and able' to perform their duties. The faculty will be measuring degrees of dependability by assessing:

- Regularity of attendance: absence from assigned areas of responsibility (clinical or class) should be the exception, and only for the most serious of reasons; perfect attendance should be the norm
- Punctuality: the dependable professional arrives not just 'on time,' but well enough in advance of 'starting time' so that they are totally ready to take on any assigned responsibilities at the start of the day, as well as when returning from lunch, breaks, etc.
- Awareness of what is expected and, once 'learned,' performing duties & responsibilities without being reminded
- Carrying through with responsibilities. This means completing all parts of assigned tasks
- Carrying through with what you promise to do
- Openly admitting to 'not knowing' when applicable
- Completing and submitting all documents and assignments 'on time'

DILIGENCE: Other ways of describing diligence are 'consistent attention to detail' and 'striving for perfection.' Performing tasks so that the result is 'just good enough to pass' is not acceptable in the health care professions. Signs of diligence we consider important include:

- Consistency in marking all images appropriately
- Consistency in imaging the appropriate centering point at the center of the image
- Neatness of submitted documents and assignments
- Completeness/comprehensiveness of submitted work

EFFECTIVE COMMUNICATION: Speaking and writing in such a way that the patient, their family, fellow students, and other staff members readily understand what is being communicated. Effective, efficient, and accurate communication can, at times, become a 'life and death' situation within the healthcare professions. Your success in using clear, effective, and

accurate communication will be assessed in situations where:

- Students speak to patients, staff, etc.
- Written communication is required
- Non-verbal communication may affect overall communications (such as movements and facial expressions); appropriateness of non-verbal communication will also be assessed through one's adherence to the appropriate appearance and behavior standards

HONESTY & INTEGRITY: There is absolutely no place for dishonesty or lack of integrity in the healthcare professions. Students' performance in meeting this standard will be assessed by measuring the degree to which they:

- Admit when they do not know something
- Admit when they make a mistake
- Submit and assume credit for only your own work
 - o In the clinical setting:
 - In images you submit for a grade
 - In patient care delivered or performed
 - o In the academic setting:
 - On tests and examinations
 - In assigned papers or research
- Give full and truthful account, when asked, of all clinical activities/incidents of which you have direct knowledge

LEADERSHIP: Although not everyone can be a 'leader' in the traditional sense of the word, radiographers are looked upon as authorities when it comes to matters pertaining to radiation exposure. In addition, the term 'professional' carries the connotation of 'self-governing,' 'self-controlling,' and 'helping peers improve.' In view of these factors, the faculty will be measuring performance in this area by watching for evidence that students:

- Help their classmates master material they have already mastered
- Perform self-directed learning activities associated with the profession such as:
 - o Subscribing to and reading professional radiology publications
 - Keeping an 'eye out' for media references to anything relating to radiation/imaging

LOYALTY: Loyalty to the profession, to the program and to the University, to the hospital(s) to which students are assigned, to the staff in their respective departments, and to fellow students are important traits of a professional. Examples of behavior the faculty will be watching for will include:

- Using professionalism when speaking about the profession, program, University, etc.
- Recognizing, and actively addressing issues impacting the profession, etc.

RESPECT FOR OTHERS AND SELF: The professional places the needs and desires of those entrusted to their care and the profession above personal desires. Some of the signs of self-respect and respect for others that the faculty consider important include:

 Keeping any and all information pertaining to a patient within the strictest bounds of confidentiality

- Assuring that one's appearance is consistently neat, clean, and appropriate to the setting. This includes:
 - Wearing the proper neat and clean scrubs
 - o Wearing appropriate identification
 - o Appropriately modifying one's grooming (including hair style, use of cosmetics and wearing of jewelry) to conform to the clinical site requirements
- Maintaining personal hygiene
- Using professional/preferred forms of address when speaking to the patient, staff, physicians, etc.
- Seeking out ways to be helpful to others
- Consistently striving to do one's best
- Identifying one's own weaknesses and striving to correct them
- Responding appropriately to constructive correction and criticism from others
- Assuring that one's behavior consistently adheres to the ARRT Standards of Ethics and to the policies of the University, program, and the hospital(s) to which the student has been assigned
- Adhering to the policies detailed in this handbook

TEAMWORK: A radiology department must rely on the coordinated activities of all individuals working in the department. For students to demonstrate that they are satisfactorily developing affective domain competency in this area, students must:

- Accurately describe their role as a team member
- Recognize those instances where others in the department may need help/assistance
- Volunteer assistance when appropriate and needed
- Endeavor to find ways to improve the overall efficiency, effectiveness, and/or accuracy of their own performance
- Accept correction/constructive criticism in a positive manner
- Assure that their availability is consistent through adherence to rotational schedules and perfect attendance

GENERAL UNIVERSITY POLICIES

Moffett Library

The Midwestern State University Moffett Library contains approximately 1,500,000 volumes, including microforms and government publications. It subscribes to approximately 450 periodicals and newspapers and has access to over 77,000 full text electronic journals. All major library services are located on the first floor, easily visible from the main entrance. The library's discovery service, Primo, is available through workstations provided throughout the building. Primo is also available outside the library through the <u>library website</u>. The library provides free access to over 50 radiology specific journals.

The following is an example list of radiology specific journals available in print and online through the MSU Moffett Library:

Administrative Radiology

American Journal of Roentgenology

Applied Radiology

Canadian Journal of Medical Radiation

Technology Diagnostic Imaging

European Journal of Radiology

Journal of Medical Imaging and Radiation

Sciences

Journal of the American College of

Radiology

Journal of Vascular and Interventional

Radiology

Magnetic Resonance Imaging Clinics of

North America

Radiography

Radiologic Science & Education

Radiologic Technology

Radiology

Radiology Management

Seminars in Radiologic Technology Seminars in Ultrasound, CT, and MRI

Visitors to Campus

To promote an academic environment for the entire Midwestern State University community, students are expected to exercise prudence in bringing children and other family members to campus. Children and family members are not allowed in classrooms, lab facilities, or hospital environments during class time or clinical rotations. Such a policy protects the children and family members and eliminates distractions for others.

Lockdown Procedures

Any incident affecting MSU campus will be communicated through the MSU Alert system and will also be posted on the University homepage.

Disability Support Services

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University makes reasonable adjustments in its policies, practices, services, and facilities to ensure equal opportunity for qualified persons with disabilities to participate in all educational programs and activities.

Disability Support Services provides information and assistance, arranges accommodations, and serves as a liaison for students, instructors, and staff. To assist students the office has books on tape, recorders, and adaptive software that can be lent to qualified individuals. A student/employee who seeks accommodations on the basis of disability must register with Disability Support Services, Clark Student Center Room 168. Documentation of disability from a competent professional is required.

Individuals with grievances related to discrimination or lack of accommodation on the basis of a disability are encouraged to resolve the problem directly with the area involved. If the matter remains unresolved, advice and assistance will be provided by Disability Support Services. Specific information on filing a grievance is available in Disability Support Services or in the Student Affairs Office, Hardin 112, and (940) 397-4291.

The Director of Disability Support Services serves as the ADA Coordinator and may be contacted at (940) 397-4140, TDD (940) 397-4515, or 3410 Taft Blvd., Clark Student Center Room 168. For more information click <u>Disability Support Services</u>

Anti-Discrimination Statement

Midwestern State University is an equal opportunity/affirmative action institution and complies with all Federal and Texas laws, regulations, and executive orders regarding affirmative action requirements in all programs and policies. Midwestern State University affirms its commitment to a policy that provides equal educational opportunities for all students and does not discriminate against any individual because of race, religion/creed, color, sex, age, national origin, or disability. For more information, see the Equal Opportunity and Affirmative Action Policy Statement

Sexual Harassment Policy

It is the policy of Midwestern State University that no member of the University community may sexually harass another. The policy is presented in detail in the Midwestern State University Student Handbook link on the <u>Dean of Students' webpage</u>. For more information, go to <u>Sex</u> <u>Discrimination and Sexual Harassment policy</u>

Any complaints alleging failure of this program to follow these policies should be brought to the attention of:

Beth Vealé, Ph.D., RT(R)(QM) Department Chair Radiologic Sciences Midwestern State University Centennial Hall 430K 3410 Taft Blvd. Wichita Falls, TX 76308 (940) 397- 4611 beth.veale@msutexas.edu

Toll Free: 1-866-575-4305

Substance Abuse/Drug Policy

The university affirms that illegal drug use is unlawful and harmful. The use of illegal drugs and alcohol abuse by students and employees could result in cognitive deficits, loss of productivity, and other health risks. These risks include an increased risk of accidents which may result in death or permanent injury. Free, confidential counseling for alcohol and other drug abuse issues is available to students and employees through the Midwestern State University Counseling Center and Vinson Health Center. Other referral resources may include assessment, individual counseling, educational programs, materials, and referral and case management through community agencies, all which might include a fee. The complete MSU policy can be found in the MSU Student Handbook.

The following sections describe MSU's policy regarding the sale, manufacture, distribution, possession and use of illegal drugs on or off university property or at university-sponsored events in accordance with federal, state, and local laws. Examples of violations include:

- Misusing over-the-counter drugs.
- Misusing or sharing prescription drugs.
- Possessing, using, being under the influence of, distributing, or manufacturing any form of illegal drug.
- Possessing paraphernalia (i.e., rolling papers, pipes, bongs, etc.) for intended or implied use of any form of illegal drug.
- Possessing paraphernalia that contains or appears to contain illegal drug residue.
- Purchasing or passing illegal drugs from one person to another.
- Using mail services to purchase, pass, or distribute illegal drugs.

This policy provides flexibility for the university in addressing drug-related offenses which occur on or off-campus. Moreover, it permits the university to address its fundamental mission of holistic education and the development of human potential. While recognizing that there is a need to address violations related to the use or possession of controlled substances, the university must address the education and well-being of all its students and employees. In addition to university-imposed sanctions, students and employees are subject to all legal sanctions under federal, state, and local law for any offenses involving illegal drugs on university property or at university activities. A student who is caught using illegal drugs, regardless of whether they were arrested, may face immediate dismissal from the BSRT program. Consequences will be evaluated on a case-by-case basis. *Illegal or unauthorized drug use within a medical facility will result in immediate dismissal from the BSRT program. If the student is in clinical, a grade of F will be assigned in the clinical course.*

Safe Harbor

The university has a Safe Harbor rule for students. The university believes that students who have a drug and/or addiction problem deserve help. If any Midwestern State University student brings their own use, addiction, or dependency to the attention of university officials outside the threat of drug tests or conduct sanctions and seeks assistance, a conduct complaint will not be pursued. A written action plan may be used to track cooperation with the Safe Harbor program

by the student. Failure to follow the action plan will nullify the Safe Harbor protection and campus conduct processes will be initiated.

Campus Carry Statement

Senate Bill 11 Handgun Policy passed by the 84th Texas Legislature allows licensed handgun holders to carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked, in accordance with state law. For more information regarding campus carry, please refer to the <u>University's campus carry webpage</u>. If you have questions or concerns, please get in touch with MSU Interim Chief of Police <u>Steven Callarman</u> by email at <u>steven.callarman@msutexas.edu</u>.

Immunization Policy

Each student entering the clinical environment is required to have the following immunizations according to Texas state law:

- 2 doses of live MMR vaccine (measles, mumps, rubella) or serologic confirmation
- TB (tuberculosis) Screening (two-step)
- 2 doses of Varicella (chicken pox) or serologic confirmation
- Td/Tdap-one dose of Tdap and TD boosters every 10 years thereafter (diphtheria, tetanus)
- Hepatitis B series and serologic confirmation
- Seasonal Flu Immunization (September March)

All required immunizations must be completed prior to the first clinical day. Students with no history of a Hepatitis B series (3 vaccines) must take the first Hepatitis B vaccine by October 1. TB (tuberculosis) screening will be done in February the semester before clinical starts. Students who have not **completed** their immunizations will **NOT** be allowed to participate in clinical until cleared by <u>CastleBranch</u> Immunization Tracking (this includes all three Hepatitis B vaccinations and/or with serology confirmation).

COVID-19 is currently affecting our community and campus. Please be aware that policies may change suddenly. Clinical site immunization policies supersede program requirements.

Students who are unwilling or unable to comply with the immunization policy must understand that some clinical agencies prohibit the presence of unvaccinated students at their facility. While the MSU BSRT program will make reasonable efforts to find appropriate alternate clinical rotations for these students, there is always a risk the student will not be permitted to complete clinical rotations, which are a required part of the curriculum.

Radiologic Sciences Program Vaccination Exemption Policy

The Midwestern State University's Radiologic Sciences Program (the "Program") requires students enrolled in courses with clinical requirements and all faculty who are physically present in the clinical environment to follow the clinical site's vaccination/immunization policies, standard transmission-based precautions, and infection control guidelines.

Certain clinical sites may allow students to request an exemption from the vaccination requirements for medical or religious reasons. Philosophical, political, scientific, or sociological objections to immunization **do not** justify an exemption.

- Individuals requesting an exemption for medical reasons will be required to submit a **Medical Exemption from Vaccinations Form** from a doctor or advanced practice provider.
- Individuals requesting an exception for religious reasons will be required to submit a **Request for Religious Exemption from Vaccinations Form**. Sincerely held religious belief, practice, or observance includes any traditionally recognized religion as well as beliefs, observances, or practices, which an individual sincerely holds and which occupy in their life a place of importance parallel to that of traditionally recognized religions.

All exemption requests will be submitted to the Program's Clinical Coordinators for review and validation. While the Program will carefully review all requests for medical or religious exemptions, **approval is not guaranteed**. The Program will carefully review each request and determine if the request should be granted. After the individual's request has been reviewed and processed, the individual will be notified, in writing, if an exemption has been granted or denied. The decision is final and not subject to appeal. Individuals are permitted to reapply if new documentation and information should become available.

Individuals with an approved exemption may be required to comply with COVID-19 testing and/or other preventive protective measures as per the clinical site's requirements. The clinical site's requirements will be specified in the exemption approval notice.

Individuals must immediately notify the Clinical Coordinator, Clinical Preceptor, department leader, or unit manager if experiencing COVID-19 symptoms (recent loss of smell or taste, or a fever of 100 F and new unexplained cough), diagnosed with or presumed to have COVID-19 by a licensed medical professional, or tested positive for COVID-19.

The Program's Clinical Coordinators will verify the individuals are following the clinical site's requirements and communicate with the clinical site as needed.

No individual will be placed in the clinical environment unless the clinical site's or Program's requirements are met before placement. Individuals currently in the clinical environment will be removed from the clinical site immediately if they do not abide by the Program's or clinical site's requirements. The Program reserves the right to restrict or alter assignments based on vaccination status for patient safety.

If a student feels they have a qualifying exemption and have been assigned to one of the clinical sites allowing exemptions, contact **Shanna Tole** for forms and information.

PROGRAMMATIC POLICIES (for admission)

Program Admissions Criteria

To be considered for admission, the following basic requirements must be met:

- 1. Be eligible for <u>admission</u> to MSU.
- 2. Print and complete the <u>BSRT Program application</u> (Link is not live until July 1st) on the department website and submit an official transcript from each institution, including Midwestern State University.
- 3. Have a cumulative GPA of 2.5 or greater on all courses required for the BSRT degree and be in good academic standing.
- 4. Earn a grade of C or higher in BIOL 1134 and BIOL 1234 before applying to the Radiologic Technology program. *More than 1 repeat of each/either in the past 5 years will result in ineligibility for the program.*
- 5. Either be core complete OR lack only 3 credit hours from core completion.
- 6. Satisfy all TSI requirements.
- 7. Have reliable Internet access (high-speed recommended) and a current, working email address.
- 8. Take the HESI Examination no later than the posted date on the website of the application year. HESI Instructions. The applicant should take all sections of the HESI except Chemistry. There is no minimum score; however, the score on the HESI will be included in the admission ranking. The specific sections to take are:
 - a. Anatomy & physiology
 - b. Biology
 - c. Grammar
 - d. Mathematics
 - e. Physics
 - f. Reading comprehension
 - g. Vocabulary
 - h. Personality style and learning style assessment
- 9. Admission to the BSRT Program is based on a points-based rubric. Scores on the rubric totaling less than 8 will be reviewed by the Admission Committee, Program Chair, and the BSRT Coordinator on an individual basis.

Prior to the *first fall semester following program admission*, students MUST provide:

- 1. Background Check Students must obtain an up-to-date background check through <u>CastleBranch</u>. The department secretary will verify the initiation of the process (i.e. payment for the background check has been submitted). All outstanding warrants and any unresolved legal issues may result in dismissal from the program. If the applicant is aware of issues prior to the background check, they should contact the American Registry of Radiologic Technologists for the procedure to pre-apply for eligibility. Failure to do so may result in ineligibility to sit for the national certification exam.
- Health Insurance Students are responsible for any personal injury that occurs at the
 university or hospital. Students will upload proof of Health/Accident Insurance to the
 CastleBranch Document Management system. It is the students' responsibility to keep
 this information current. Any MSU student may purchase health insurance through the
 university.

Failure to upload evidence of the above to the <u>CastleBranch</u> document management system may result in dismissal from the program.

3. CPR Certification – Students are required to have up-to-date CPR: Basic Life Support for Healthcare Providers certification by the American Heart Association. Students will upload current cards to the CastleBranch Document Management system.

Failure to upload evidence of the above to the <u>CastleBranch</u> document management system will result in a formal written warning and may be ineligible for clinical participation.

Transfer Credits

Credits transferred from other institutions to fulfill general education requirements will follow Midwestern State University's Transfer Credit Policy. More information can be found on the MSU webpage: <u>Equivalencies</u>.

It is the program's policy that students transferring radiologic science courses, with the exception of Introduction to Radiologic Technology/Science and Medical Terminology (both of which are evaluated on a case-by-case basis), are not accepted in transfer. Students must complete the BSRT program in its entirety through Midwestern State University.

If a student transfers from another Texas institution as "core complete" that student is not responsible for completing MSU's core; however, courses that differ from MSU's core will not be used to calculate ranking. For example, if a student is core complete at another Texas University or 2-year junior college and has not completed a Global Component area course, this course will not be used. Those areas will be considered complete and a course will not be used in that spot for ranking purposes.

Background Check and Drug Screening Policy

The Radiologic Technology Program is committed to ensuring public and professional trust and providing safe patient care. In order to meet this goal, background checks and drug screening of students is required. Some of our clinical education settings require additional criminal background investigations of all employees and students. To comply with these requirements, accepted students will be asked to submit to these tests to ascertain the student's suitability for clinical rotations.

Background Check

This information will remain confidential and will only be viewed by the Radiologic Science Program Chair or designee. Any criminal conviction which is found during the background investigation that may deem a student unsuitable for clinical rotations will be considered on a case by case basis. Additional information regarding the conviction may be required in order to make an informed decision. The background investigation will be made available to clinical education settings that require such. Individuals at the Clinical Education Setting authorized to make decisions regarding an individual's eligibility to attend a setting will inform the Program Chair if a student will be allowed to attend clinical at that setting. If an offense appears on the criminal background check that disqualifies the student from attending clinical experiences, the clinical site(s) will notify the program regarding any student's disqualification for attending clinical at that site. The student will receive written notification.

A student who has been convicted of a crime, including a felony, a gross misdemeanor, or a misdemeanor with the sole exception of speeding and parking violations, must report these convictions to the American Registry of Radiologic Technologists (ARRT). All alcohol and /or drug related violations must be reported. All potential violations must be investigated by the ARRT in order to determine eligibility. Individuals must file a pre-application with the ARRT in order to obtain a ruling of the impact of their eligibility for the examination. This pre-application may be submitted at any time either before or after entry into an accredited program. For pre-application contact the ARRT at:

ARRT

1225 Northland Dr. St. Paul, MN 55120-1155 Tel: (651) 687-0048

Drug Screening

Students are required to submit for a drug screening test before clinical rotation or at any time in the program. Drug screening will be scheduled through the CastleBranch Drug Testing system. This is a 16-panel urine drug screening which looks for amphetamines, barbiturates, benzodiazepines, cannabinoid, cocaine, fentanyl, MDA/MDMA, meperidine, methadone, opiates, oxycodone, phencyclidine, propoxyphene, suboxone, tramadol, and antidepressants. The student will be responsible for payment of the test. Non-negative results will be processed further and may require additional testing. Additional drug screening will be at the student's expense. If

the student tests positive for any illegal substance they will be withdrawn from the program immediately. *This is a NO TOLERANCE policy*.

PROGRAMMATIC POLICIES (after admission)

Program Orientation

Prior to entering the professional program, students will be introduced to the Radiographic Science Program. This will include the use of radiation monitoring badges, policies, clinical policies, medical ethics, interpersonal relationships, student services including accommodations counseling, and tutoring, and the professional societies.

It is the responsibility of each student to be fully aware of the contents of the handbook and what penalties exist if the student deviates from any outlined policy.

Orientation to the program will occur the Friday before the Spring Semester start date.

Attendance is mandatory. Students will not be excused for vacations and will forfeit their admission. Student athletes with conflicting tournament dates should call or email their advisor.

Planning Courses for the Degree

Students should become familiar with the courses they need to graduate. Students are encouraged to plan and obtain advice about scheduling courses so they are taken in the proper sequence or semester. Each student will be assigned an advisor and should make an appointment with their advisor each semester when scheduling courses. Good planning could save time and eliminate unnecessarily heavy schedules. However, students should take care when dropping any course during the program as doing so may complicate or prevent on-time graduation. Students should inform their advisor when dropping courses.

A quarter of the courses are offered online. It is critical that students have access to Windows or MAC compatible computers (no Chromebooks) and email addresses. Chromebooks do not work with the proctoring software provided by the University. The university offers help to students who have not experienced online courses through the distance education department and online help in the learning management system D2L. The student should contact their advisor if they need assistance.

When planning a semester schedule, students cannot exceed forty (40) contact hours per week of didactic and clinical involvement. Clinical assignments for each student cannot exceed 10 hours in one day.

The total amount of hours required for this degree is 120. A minimum of 30 advanced (Jr/Sr level) semester hours are required of the total 120 degree hours. Courses at MSU beginning with a 3 or 4 are considered advanced. Students MUST complete 12 semester hours at MSU from a particular catalog to graduate under that catalog. Students should keep a copy of their degree plan on file and update it periodically.

Students are required to attend all semesters in the program in the order they appear on the degree plan.

Advisors for Students

Advisement Stage	Advisor	Procedure
Pre-Program Acceptance Advisement	HSHS College Advisor (Suzanne Hansen)	Students are advised on eligibility requirements for the BSRT program. Refer to RADS Secretaries for additional program information, tours, etc.
Post-Application Advising	RADS Secretary (Kamy Holloway)	Students are advised about all requirements to complete the BSRT program admission.
Program Acceptance	Admissions Committee	The committee reviews all files and admission rubrics and selects students for admission.
Program Advising	Faculty	Once students accept the program slot, the secretary assigns each student a faculty advisor.
Continued Program Advising	Faculty	Each semester, the student must visit with their assigned advisor to review their degree plan and other graduation requirements before the advising hold is removed.

Each student is assigned an academic advisor. It is in the student's best interest to be advised by their advisor. A student is assigned an academic advisor once they have asked to be listed as a pre-major. Students may be advised by any Radiologic Science faculty member, regardless of their assigned advisor, if their advisor of record is unavailable. If, for some reason, the student or faculty member believes another individual should become their advisor, this change will be made. The program chair should be contacted when a change is desired. In the event that a faculty member leaves, the student will be assigned another advisor. The designated faculty member must authorize all registration, drop-add requests, and petitions.

To track a student's progress toward completion of prerequisite courses, the advisor and student will complete/update the "Degree Plan" form each time they meet to discuss class schedules. In addition, students will need to contact their advisors each semester to remove advising holds.

Program details including admissions procedures, faculty, and many other useful links can be found on the <u>program's website</u>.

Office Hours

The undergraduate secretary's office hours are 8:00 a.m. to 5:00 p.m. Monday through Friday.

Faculty have set office hours for each semester posted in front of their office door and online. All faculty will schedule individual student appointments. Students can contact them by phone or by email.

Students are encouraged to make appointments with faculty rather than "dropping in". The faculty will provide assistance to students as necessary. However, if students are aware they are having problems in a specific area, they should make an individual appointment for help.

TUITION AND FEES FOR RADIOLOGIC TECHNOLOGY MAJORS

(Professional component of the Radiologic Technology Program)

Semester 1: Spring II

- Program Academic Requirements (see degree plan for specific hours)
 - o Tuition & Fees link: https://msutexas.edu/finaid/msu-coa.php
 - o Castlebranch \$variable

Semester 2: Summer II

- Program Academic Requirements (see degree plan for specific hours)
 - o Tuition & Fees link: https://msutexas.edu/finaid/msu-coa.php

Semester 3: Fall III

- Program Academic Requirements (see degree plan for specific hours)
 - o Tuition & Fees link: https://msutexas.edu/finaid/msu-coa.php
- Lead markers (2 sets w/initials) ~\$45.00 (varies)
- Rad Tech Boot Camp subscription ~\$170 for 22-month access*
- Immunizations \$variable
- Health Insurance (1 year) \$variable
- CPR Certification ~\$70.00*

Semester 4: Spring III

- Program Academic Requirements (see degree plan for specific hours)
 - o Tuition & Fees link: https://msutexas.edu/finaid/msu-coa.php
- Immunizations \$variable
- Liability Insurance \$18.00*
- Drug Testing \$50-100*
- Uniforms \$variable

Semester 5: Summer III

- Program Academic Requirements (see degree plan for specific hours)
 - o Tuition & Fees link: https://msutexas.edu/finaid/msu-coa.php
- HESI Exit Exams ~\$130*
- Trajecsys subscription (1 year) ~\$100.00*

Semester 6: Fall IV

- Program Academic Requirements (see degree plan for specific hours)
 - o Tuition & Fees link: https://msutexas.edu/finaid/msu-coa.php
- Health Insurance (1 year) \$variable
- ASRT student membership (1 yr)- \$35.00*

Semester 7: Spring IV

- Program Academic Requirements (see degree plan for specific hours)
 - o Tuition & Fees link: https://msutexas.edu/finaid/msu-coa.php
- ARRT Certification Exam Application \$200.00*
- Texas MRT License \$80.00*
- LifeTouch Photo \$25.00*

The following fees are included in our estimate of tuition and fees for each semester but are listed separately here (not as additional charges).

Instructional Enhancement Fee (per credit hour)

• Gunn College of Health Sciences and Human Services (COHSHS) \$24.00*

Distance Education fee:

• A fee of \$50.00* per credit hour will be added to all courses designated as distance learning.

^{*}These prices are subject to change due to academic license and discounts.

^{*}Prices are as accurate as possible at the time of publication and are subject to change without prior notification (September 2023)

Required Textbooks

Book editions are subject to change. Students should check with professors for the most up-to-date information.

Class	Text

Pre-program Acceptance

RADS 4123 Practical Statistics for Nursing & Health Care, Fowler, ISBN 9780471497165

Semester 1: Spring II

- RADS 2012 Quick and Easy Medical Terminology, Leonard, 9th ed. ISBN 9780323595995
- RADS 3133 Radiographic Pathology for Technologists, Kowalczyk, 8th Edition, ISBN 978032391298 (7th edition will be accepted for Spring 2023)
- RADS 3523 <u>Publication Manual of the American Psychological Association</u>, 7th Edition, ISBN 978-1433832161
- RADS 4613 <u>Legal and Ethical Issues for Health Professions</u>, Nguyen, 4th ed. ISBN 978-0323496414

Semester 2: Summer II

- RADS 3513 <u>Essentials of Radiographic Physics & Imaging</u>, Johnston, 3rd Edition, ISBN 9780323566681
- RADS 4913 APA Manual. Same as RADS 3523

Semester 3: Fall III

- RADS 3043 Bontrager's Textbook of Radiographic Positioning and Related Anatomy, ^{10th} Edition, ISBN 9780323653671
- RADS 3243 Patient Care in Radiography, Ehrlich, 10th Edition, ISBN 9780323654401
- RADS 3763 Radiologic Science for Technologists, Bushong, 12th Edition, ISBN 9780323661348

RADS 4533

Semester 4: Spring III

- RADS 3033 <u>Essentials of Radiographic Physics & Imaging.</u> Same as RADS 3513 <u>Digital Imaging and PACS</u>, Carter Vealé, 4th Edition, ISBN 9780323826983
- RADS 3053 Bontragers. Same as RADS 3043

RADS 3063 Patient Care in Radiography. Same as RADS 3243
Bontragers. Same as RADS 3043
Essentials of Radiographic Physics. Same as RADS 3513

RADS 4002 Radiographic Image Analysis. Martensen, 5th Edition, ISBN 9780323522816

Semester 5: Summer III

RADS 4114 Radiographic Image Analysis. Same as RADS 4002
Radiographic Image Analysis Workbook, Martensen, 5th Edition, ISBN 9780323544634

RADS 4733 <u>Sectional Anatomy for Imaging Professionals</u>, Kelley, 3rd Edition, ISBN 9780323082600

Semester 6: Fall IV

RADS 3213 Nursing Interventions & Clinical Skills, Elkin, 6th Edition ISBN 9780323187947

Pharmacology & Drug Administration for Imaging Technologists, Jensen, 2nd Edition, ISBN 9780323030755

RADS 4215 None

RADS 4912 Radiography: PREP, Saia, ISBN 9780071787048
Lang Q&A Radiography Examination (w/CD), Saia,
ISBN 978007178715
Radiographic Image Analysis Workbook. Same as RADS 4114

RADS MOD Varied textbooks for modality choices

Semester 7: Spring IV

RADS 4315 None

RADS 4332 <u>Radiography: PREP</u>. Same as RADS 4912 Lang Q&A Radiography Examination. Same as RADS 4912

RADS 4633 None

RADS MOD Varied textbooks for modality choices

Estimated Total Cost: \$2000

To make books more affordable, MSUTEXAS Radiography program, Elsevier, and the campus bookstore have collaborated to make a discounted Print & eBook bundle available to students.

The bundled package contains only the following required titles:

Patient Care in Radiography: With an introduction to medical imaging, 10e	Ehrlich & Coakes	9780323654401
Digital Radiography and PACS, 4e	Carter & Vealé	9780323826983
Radiologic Science for Technologists, 12e	Bushong	9780323661348
Radiographic Image Analysis, 5e	McQuillen- Martensen	9780323522816
Bontragers Textbook of Radiographic Positioning and Related Anatomy, 10e	Lampignano & Kendrick	9780323653671

These titles are required for the following courses: RADS 3033, RADS 3043, RADS 3053, RADS 3063, RADS 3243, RADS 4002, and RADS 3763.

The book package is only available at the campus bookstore.

Midwestern State University Bachelor of Science in Radiologic Technology Degree Plan Started Spring 2023-Graduating Spring 2025

Name				M#	Catalog Expires	AUGUST 2030	Date	
	Last	First	MI	•			_	

Comments: A minimum of 33 advanced (Jr/Sr level) semester hours is required of the total 120 semester credit hours required for the degree. Courses at MSU beginning with a 3 or 4 are advanced. Students MUST complete 12 semester hours at MSU from a particular catalog to graduate under that catalog. Students should keep a copy of this degree plan on file and update it periodically. Students must satisfy Writing Proficiency Exam requirements between 60 and 90 hrs.

Fall I or	O/P	Course Name	Credits	Comp	Course Sub	RADS Elective Co		
		BIOL 1134 ANAT & PHYS I *	4			RADS 4513 ADM & SUPR	RADS 4853 ES FORENSIC ME	
prior to		ENGL 1103 or 1123 or 1143	3			RADS 4813 TEACHING STRAT		
application or core		PSYC 1103 GEN PSYC OR SOCL 1133 INTRO TO SOCL	3			Modality Se	election	
complete		POLS 1333 AMER GOVT I	3			СТ	4703, 4783	
		CULTURAL & GLOBAL UNDERSTANDING	3			MRI	4743, 4773	
Spring I or		BIOL 1234 ANAT & PHYS II *	4			Mammography	4753, 4763	
prior to		COMMUNICATION 010B	3			Teaching	4813, 4863	
application or core		CORE MATH	3					
complete		POLS 1433 AMER GOVT II	3					
		HIST 1233 HIST SINCE 1865	3					
*BIOL 1134 &	1234 mu	st be completed before the start of the fall se	nester				I .	
		st 1st and September 30th.						
Fall II		HIST 1133 HIST TO 1865	3					
or core		LANGUAGE, PHILOSOPHY & CULTURE	3			Additional Rec	quirements	
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		UNDERGRADUATE INQUIRY &	3					
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		DADO 4422 DATA ANALYOIO						
	0	RADS 4123 DATA ANALYSIS or approved statistics	3					
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Spring II	Р	RADS 2012 INTRO MED IMAGING & TERM	2			Area	Cr. Hrs.	Adv. Hrs
	0	RADS 3523 ESSEN. OF RESEARCH	3			MAJOR	78	33
	Р	RADS 3133 IMAGING PATHOLOGY	3			General Core	42	0
	Р	RADS 4613 ETHICS AND LEGAL ISSUES IN MED IMAGING	3			TOTAL	120	33
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Fall III	Р	RADS 3243 PATIENT CARE	3			Advisor:Chair:		
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Fall III	Р	RADS 3243 PATIENT CARE RADS 3043 RAD PROCEDURES I RADS 4533 INFORMATICS RADS 3763 RAD PROT & BIOLOGIC	3			Chair:		
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Student Records

The University maintains accurate and confidential student records. It is the right of the students to have access to most of their educational records, and it is the duty of the University to limit access by others in accordance with existing guidelines and relevant laws. Student records, with certain exceptions, will not be released without prior consent of the student through written request.

The following student records may not be viewed by students: financial information submitted by their parents, confidential letters and recommendations, employment job placement or honors to which they have waived their rights of inspection and review. Students have the right to review and question the content of their educational records within a reasonable length of time after making a request for review. If there are any questions concerning the accuracy or appropriateness of the records that cannot be resolved informally, an opportunity to challenge a perceived inaccuracy or violation of privacy will be provided through the appeal mechanism.

Midwestern State University maintains that the student records policy in compliance with the Family Educational Rights and Privacy Act (FERPA) of 1997. In accordance with Midwestern State University's Policy on Family Educational Rights and Privacy Act, information about a student generally may not be released to a third party without the student's written permission. Exceptions under the law include state and federal educational and financial institutions, and law enforcement officials. The only records that will be released concerning students is that information that can be considered "directory" information such as: field of study, name, address, telephone number, participation in officially recognized activities and sports, weight and height of members of athletic teams, attendance, and degrees and awards. The policy also permits students to review their educational records and to challenge the contents of those records.

With regard to clinical radiography course files, only the Radiologic Science faculty or the program secretaries may remove files to be copied. Students may not remove or copy the file themselves. Any violation of the above will result in disciplinary action by the Radiologic Science faculty.

Student Confidential Information

In accordance with the Family Education and Rights Act (FERPA) 1997, this program maintains all students' records as confidential and can only release certain items designated as directory information. Directory information is considered name, local and permanent address, telephone listing, major field of study, dates of attendance, etc. This information is only given out to individuals that have a need to know, such as technical safety, clinical instructors, the Dean's office, etc. The student can prohibit the release of this directory information by making a written request to the Radiologic Technology Program.

Students must be aware that reviewing another student's folder or clinical paperwork is a violation of the confidentiality of that student's records.

Any violation of the above will result in disciplinary action by the Program Faculty.

Academic Standards

The following statements outline the minimum academic standards for the Radiologic Technology Program:

- 1. All progression (RADS) courses must be taken in the sequence prescribed and every effort should be made to complete professional courses as described. Non-progression (professional) courses must be completed for degree eligibility and must be completed by the end of the Summer IV semester.
- 2. Students must a earn a C or above in all courses. Progression courses require a minimum score of 75% to achieve a grade of C while non-progression courses require a minimum score of 70% to achieve a grade of C. Each course earning a grade below a C can only be repeated once.
- 3. Students must graduate from the program to sit for the ARRT Radiography Registry.

Information about the procedures for when a student is unable to meet the minimum academic standards of the program can be found in the section titled *BSRT Program Progression Policy* of this handbook.

National Registry

The American Registry of Radiologic Technologists (ARRT) is the only examining and certifying body for radiologic technologists in the United States. Upon completion of the curriculum, the student is eligible to apply to sit for the Registry Examination. To become a Registered Technologist in Radiography, R.T. (R) (ARRT), students will have to successfully complete the ARRT examination.

The ARRT examination is offered any day after students graduate. Students will need to make an appointment to take the examination. It is suggested that students take the examination as soon after graduation as possible. There is a course offered the last semester of the program titled "RADS 4332 – Radiologic Technology Seminar" that will familiarize students with the process of applying to take this exam.

One issue addressed for certification eligibility is conviction of a crime, including a felony, a gross misdemeanor, or a misdemeanor with the sole exception of speeding and parking violations. All alcohol and/or drug related violations must be reported. All potential violations must be investigated by the ARRT in order to determine eligibility. Individuals may file a preapplication with the ARRT in order to obtain a ruling of the impact of their eligibility for the examination. This pre-application may be submitted at any time either before or after entry into an accredited program.

ARRT

1225 Northland Dr. St. Paul, MN 55120-1155 Tel: (651) 687-0048

Texas State Licensure

All graduates who pass the American Registry of Radiologic Technologists (ARRT) certification examinations are qualified for general Medical Radiologic Technologist (MRT) certification in Texas. Twenty-eight (28) days prior to completion of the MSU program, students may apply for a certificate from the State of Texas, Texas Medical Board. For more information, please visit the Texas Medical Board licensing website.

Other states may have different licensure requirements. If a student is planning to seek employment in a state other than Texas, they may choose not to register for a Texas MRT and may instead apply for licensure in the state of their choosing, if it is required. Faculty can assist students with this process if necessary.

Professional Societies

Students will be introduced to several professional organizations while attending courses. These are presented as a means to develop professional responsibility.

- Students are strongly encouraged to join and attend meetings and other activities of the student professional organization, Radiology Club for MSU Radiologic Science Students.
- Students are encouraged to join the <u>Texas Society of Radiologic Technologists</u> (TxSRT) where they are given the opportunity to attend professional meetings which offer informative lectures given by qualified professionals from Texas and the nation. A student must be a member of the Texas Society to submit papers or exhibits for consideration in Society competitions.
- Students are required (in the second half of the program) to join the <u>American Society of Radiologic Technologists</u> which has many resources just for students. They help students prepare for the future and success in school. Membership includes:
 - a) **Exam preparation** student members get access to the *Radiography Student Exam Assessment Library* TM which will help get them set for the radiography exam.
 - b) **Resources and study tools** the Student Center contains study modules and drill and practice exercises, among many other online resources.
 - c) **Prepare for the Clinical Environment** access to the Compliance Suite containing 33 modules on key competencies for working in health care.
 - d) **Career Assistance** access information videos and tips on résumés, job searches, interviews, and more. Plus, you can ask questions and network with other students and R.T.s in your area in the ASRT communities.
 - e) **Exclusive Discounts** save money on items you need such as textbooks, scrubs, shoes, ARRT exam preparation materials, home, and auto insurance and more.
- Once accepted to the program, students are automatically considered members of the <u>Association of Collegiate Educators in Radiologic Technology</u> (ACERT). See your advisor for specific details.
- MSU Texas is an institutional member of the Texas Society for Advancement of Health Professionals (TSAHP). Students are encouraged to become members to participate in student competitions and attend the annual conference to network with students and professionals from a variety of allied health professions in an effort to broaden their appreciation for members of the healthcare team they will encounter as a radiologic technologist.

Program Honors

An awards ceremony to recognize and honor graduates is held at the end of the last semester the student is enrolled in the program. All department honors and awards are acknowledged at the award ceremony. Student attendance is mandatory.

The following awards will be presented at the ceremony:

Outstanding Graduating Student Award

In order to qualify as a nominee for this award, a graduating baccalaureate student must maintain a 3.5 GPA in all required Radiologic Science courses. In addition, the faculty, when voting, will consider each candidate's participation in the classroom along with professional, campus, and committee activities. Final selection will be made by majority ballot of the faculty.

MSU Highest Scholastic Standing Award

This award is given to the Radiologic Technology Degree Program graduate who attains the highest grade point average (GPA) in the required Radiologic Science courses. GPA ties will be assessed by the Department Chair and Faculty.

Clinical Award

After completion of the second clinical semester, the Clinical Coordinator(s) will evaluate student records for overall clinical performance. The evaluation process will take into consideration the following:

- 1. Scores of the Professional Development Evaluations from the first two clinical semesters. (Those students with a numerical score of 37 or above per clinical semester will be considered);
- 2. Nominations by the Clinical Instructor by letter of recommendation;
- 3. Number of completed competency evaluations from the List of Examinations in the Student Handbook, by the midterm point of the final clinical semester;
- 4. Students' adherence to all clinical and university policies and procedures.

A maximum of four students will be presented to the full Radiologic Science faculty for voting and winner selection.

Anton Zembrod Award of Achievement

This award is given to one or two graduating senior students for outstanding achievement in the radiology program despite overwhelming personal circumstances. The students can be nominated by the clinical instructors, faculty, or students. Nominations are submitted for selection by MSU Radiologic Science faculty.

Jackie Miller Memorial Scholarship

This scholarship is given to one or more junior student(s) beginning clinical rotations. Faculty choose the scholarship recipient based on work ethic, willingness to help others, and motivation to improve. Recipient must meet minimum course grade requirements.

Scholarships

Scholarships are available through outside entities and the University, and students will be made aware of these opportunities through faculty and the MSU Texas Financial Aid Department. Aside from those opportunities, there are also department scholarship opportunities when funds are available, BSRT students may apply for scholarships through the radiology program each academic semester.

The criteria for receiving a department scholarship are as follows:

- Academic standing within the class
- Financial need
- Professional/University extracurricular participation

Information about criteria for scholarships outside the department are dependent on the scholarship and should be assessed on a case-by-case basis.

Academic Honesty

Honesty is a necessary trait in all health care professionals. It is assumed by the Program that all students practice honest and ethical behavior. Inability to fulfill this assumption will result in the student being dismissed from the Program. All students enrolled in the Radiologic Science Program at Midwestern State University agree to abide by the Student Honor Creed:

"As an MSU student, I pledge not to lie, cheat, steal, or help anyone else do so."

As students at MSU, we recognize that any great society must be composed of empowered, responsible citizens. We also recognize universities play an important role in helping mold these responsible citizens. We believe students themselves play an important part in developing responsible citizenship by maintaining a community where integrity and honorable character are the norm, not the exception.

Thus, we the students of Midwestern State University resolve to uphold the honor of the University by affirming our commitment to complete academic honesty. We resolve not only to be honest but also to hold our peers accountable for complete honesty in all University matters.

We consider it dishonest to ask for, give, or receive help in examinations or quizzes, to use any unauthorized material in examinations, or to present, as one's own, work or ideas which are not entirely one's own. We recognize that any instructor has the right to expect that all student work is honest, original work. We accept and acknowledge that responsibility for lying, cheating, stealing, plagiarism, and other forms of academic dishonesty fundamentally rests with each individual student.

We expect of ourselves academic integrity, personal professionalism, and ethical character. We appreciate steps taken by University officials to protect the honor of the University against any who would disgrace the MSU student body by violating the spirit of this creed.

Plagiarism

Plagiarism is defined by Webster as: **Plagiarize** \'pla-je-,riz *also* j - -\ vb -rized; -riz·ing vt [plagiary]: to steal and pass off (the ideas or words of another) as one's own: use (a created production) without crediting the source vi: to commit literary theft: present as new and original an idea or product derived from an existing source - **pla·gia·riz·er** n

Below is a list of the most common forms of plagiarism that should be avoided to prevent disciplinary actions.

- Buying a paper from a research service or term paper mill
- Turning in another student's work
- Turning in a paper a peer has written for the student
- Copying a paper from a source text without proper attribution
- Copying materials from a source text, supplying proper documentation, but leaving out quotation marks
- Paraphrasing materials from source text without appropriate documentation
- Submitting a paper previously submitted to another course
- Copying work that was previously published by the student without citing themselves

To prevent possible intentional or unintentional plagiarism, all students are advised to seek assistance from program faculty regarding proper methods of source citation.

Based upon the severity of the findings, appropriate disciplinary action will be taken, including, but not limited to, the following: the opportunity for resubmitting with corrections to receive a lower letter grade, failure in the course, academic probation, or expulsion from the program and the University.

The entire University Academic Dishonesty Policy can be found in the <u>University Student</u> Handbook.

CLASSROOM/COURSE POLICIES

Attendance

Absences should be kept to an absolute minimum. Students will be held accountable for all assignments missed due to absence. All arrangements relating to absences will be made with the faculty member who is responsible for the class that was missed. Each instructor establishes their own attendance/tardiness policies. It is the student's responsibility to be familiar with the attendance policy of each course as is stated in the course syllabus.

Vacation

The Radiologic Technology Program **makes no provision for any vacation time to students** in the program other than semester breaks and the vacation periods scheduled on the university calendar.

See clinical calendar for designated holidays, breaks, and vacation periods.

A student may not shorten the length of their clinical rotation by accumulating compensatory time.

Cell Phones

Cell phones should not be used in class or in the clinical setting unless asked to by the instructor. They should be placed in silent or vibrating mode or turned off. Additionally, retrieving text messages, surfing the Internet, checking social media accounts, or answering messages (verbal or text), should not occur during class time, lab time, or during the clinical experience. Failure to follow this policy will result in a deduction of grade or disciplinary action in accordance with the disciplinary policy at the discretion of the course instructor/clinical coordinator. If students need to communicate to someone outside of the class and it is urgent or may be an emergency situation, please inform the instructor/clinical coordinator so that accommodations to this policy may be made.

Professional Conduct/Behavior

The Radiologic Sciences department and clinical assignment areas should be places where patient confidence is inspired. This can be accomplished when one consistently exhibits a professional attitude. Students are expected to maintain professional behavior at all times, in both the classroom and clinical settings. Students also must always be aware of and comply with all policies and procedures of the Clinical Education Setting, even if those policies differ between sites.

EXAMPLES OF PROFESSIONAL BEHAVIORS:

- Show initiative and a positive attitude towards assigned tasks and constructive criticism
- Be punctual, use good judgment, and work well independently or with a team

- Build interpersonal relationships with peers and patients
- Perform well under pressure and apply effective communication
- Practice quality patient care and treat everyone with equality, dignity, and respect
- Adhere to HIPAA and Rules and Regulations of OSHA
- Follow all clinical affiliates, program, and University policies, rules, and regulations

STUDENTS SHALL NOT:

- Be in possession of or under the influence of controlled substances (drugs, alcohol, etc.), nor engage in their use while on clinical assignments or in didactic course work, nor during any function where identified as an MSU Texas BSRT student
- Engage in immoral conduct
- Chew gum, eat, or drink in clinical areas
- Sleep in class or on clinical assignments
- Engage in theft of any articles from the clinical education setting
- Leave patients unattended while undergoing diagnostic procedures
- Falsify documentation
- Abuse patients, faculty/clinical instructors, other students, technologists, or any other persons physically, verbally, mentally, psychologically, or by cyber methods
- Smoke, use smokeless tobacco, or vape in areas where it is prohibited while on campus or clinical assignments
- Leave the assigned clinical areas unless instructed/permitted to do so by the clinical coordinator or clinical instructor
- Use inappropriate language or disrespectful commentary in the clinical or didactic setting,
- Receive or make personal phone calls, text messages, etc., except in emergencies
- Repeat radiographs without permission and direct supervision from a supervising technologist, clinical preceptor, or clinical staff.

Failure to comply with these requirements will result in disciplinary action.

Appropriate Use of Social Networking

Social networking websites provide unique opportunities for students to get to know one another, share experiences, and keep in contact. As with any public forum, it is important that users of these sites are aware of the associated risks and act in a manner that does not embarrass the students, the Radiologic Technology Program, and the University. It is also important to ensure no information about any patient encounter is made publicly available, no matter how vague it may be appear to be. Students are expected to be respectful of the views and opinions of others in the program and the University. This rule extends to interactions through discussion boards, email, phone conversations, texting, social media, and all other methods of communication. No foul or inappropriate language will be tolerated.

Students are expected to check emails daily for announcements and other program information. Students are expected to use correct English and grammar when writing papers, sending emails, posting to discussion boards, and all other forms of communication.

Posts to social media sites in regards to MSU Texas, its programs, affiliates, faculty, and/or students should be carefully considered. While you are free to post in your own personal accounts, the content of your posts may negatively impact the University and/or its constituents and may warrant disciplinary action.

Inappropriate electronic content (comments, pictures, etc.) that does not reflect the professional behavior expected of professional students may warrant disciplinary action from the program and/or University.

The Radiologic Technology Program has adopted the following guidelines to assist students in carefully using these sites.

A. Personal Privacy

- Set students' profiles on social networking sites so that only those individuals whom the students have provided access may see one's personal information.
- Evaluate photos of students that are posted to these sites and "untag" photos that depict the student in what may be construed as compromising situations.
- Be aware of the security and privacy options available to them at any sites where students post personal information. Keep in mind that privacy settings are not impervious, and information can be shared willingly or unwillingly with others, even with "Friends Only" access.

B. Protection of Patient Information

- Comments made on social networking sites should be considered the same as if they were made in a public place in the clinical setting.
- HIPAA rules apply online, and students may be held criminally liable for comments that violate HIPAA.
- Remember that simply removing the name of a patient does not make them anonymous.
 Family members or friends of that patient or of other patients the student is caring for may be able to determine to whom the student is referring based on the context.
- No posting of patient records including images from any modality. Doing so is a serious violation of HIPAA subject to criminal action and dismissal from the program.

C. Professionalism

- Use of these sites can have legal ramifications. Comments made regarding care of
 patients or that portray the student or a colleague in an unprofessional manner can be
 used in court or other disciplinary proceedings.
- Statements made under students' profiles are attributable to the student and are treated as if the student verbally made that statement in a public place.
- Use discretion when choosing to log onto a social networking site at school. Keep in mind that the use of these sites during lecture and clinical assignments is prohibited.

- Keep in mind that photographs and statements made are potentially viewable by future employers.
- Students may be subject to disciplinary actions within the University for comments that are either unprofessional or violate patient privacy.
- Remember that each student is representing MSU and the Radiologic Technology Program when logging on to a site and make a comment or post a photograph.

Course Evaluations

Evaluation of courses and instructors by the students will be carried out in accordance with university policy. Individual instructors may develop their own, more specific, evaluation forms and utilize these in addition to the university's form.

All students are requested to complete course evaluations for each course in which they are enrolled. Course evaluations will be conducted once a semester. Students are invited to utilize constructive criticism in completing the evaluations so that faculty can identify strengths and weaknesses in the course and plan accordingly for the future.

Faculty do not review the actual evaluation by an individual, but receive a generic summary or an average of the ratings. Faculty do review all of the written comments.

Withdrawal Procedures

A student who formally withdraws from a course prior to the last day to withdraw as listed in the university calendar will receive a "W" on their official transcript. A student who fails to complete a course or who withdraws after the last day to withdraw will receive an "F" on their official transcript. Withdrawal from a Radiologic Science "progression" course will result in dismissal from the program.

Incompletes/No Grade Reported in the Professional Curriculum

Typically, incompletes are not allowed in the Radiologic Technology program. Only the program chair is authorized to award an incomplete in conjunction with the course instructor.

BSRT Program Progression Policy

All courses with a RADS prefix require a grade of C or better for the course to be successfully completed. Courses are clearly marked as 'progression' or 'non-progression' on the BSRT degree plan. Progression courses require a grade of 75% to earn a C. Non-progression courses require a grade of 70% to earn a C.

The following rules will govern the students' progression through the BSRT Program.

A student who earns a grade below a C or withdraws from any progression course will be dismissed from the program. The student may reapply to the program (see *BSRT Reapplication Procedure* in this handbook).

- The student must submit a letter of intent to reapply no later than seven days prior to the beginning of the next semester. (e.g., should a student be dismissed during a fall semester, the deadline to reapply would be seven days before the beginning of the spring semester).
- The clinical site assignment at the time of dismissal will be voided. Readmission is contingent upon availability of clinical site assignments.
- Non-progression courses may not be taken out of sequence while in the process of reapplying.
- Unsuccessful completion of any two courses, at any time, will result in dismissal from the program without opportunity to reapply. (e.g. failure of the same course after readmittance; failure of two progression courses in one semester; failure of two non-progression courses at any time).
- Unsuccessful completion of one non-progression course requires repeating the same course or taking a different approved course instead (with approval by the Department Chair).
- If a course is failed then repeated successfully, the initial failure counts towards the total of two failures. A second failure will result in dismissal from the program without opportunity to reapply.
- Violations of program or University policies (e.g., drug or alcohol use, criminal activity, falsification of records including but not limited to time records or patient records, HIPAA regulations, academic or clinical dishonesty), will result in dismissal from the BSRT program without opportunity to reapply.
- Re-enrollment in an unsuccessfully completed non-progression course is the responsibility of the student. Seats will not be held in courses taken out of sequence and enrollment is on an "as available" basis.
- Students must complete all BSRT course work by Summer IV. Exceptions must be approved by the Department Chair.
- Withdrawal from all courses because of circumstances beyond the student's control will result in readmission being evaluated on a case-by-case basis and requires the approval of the Department Chair.

BSRT Reapplication Procedure

- Unsuccessful completion of any single progression course requires reapplication to the BSRT program.
- Failure to successfully complete any two RADS courses will disqualify a student from reapplying to the BSRT program.
- Students must schedule meeting with the Department Chair and the Admissions Committee Chair to discuss the following:
 - o Changes in behavior that will facilitate successful program completion.
 - o Clinical site availability.

- Other requirements for readmission (degree plan changes)
- Students may only be readmitted to the BSRT program once. Any subsequent dismissal for any reason will prohibit the student from reapplying to the program.
- Successful re-admittance must occur within one year (e.g., if a student was dismissed during or at the end of Fall 2022, they must reenter the program no later than Fall 2023).
 Any student who does not re-enter the program during this one-year period must apply during the next competitive application process.
- Students may be required to complete the degree plan in effect at the time of readmission.
- Auditing successfully completed courses is recommended once readmitted.
- Students will be required to 'test out' of all successfully completed progression courses.
 - o 'Test out' means to score 75% or higher on a comprehensive exam to determine whether or not information has been retained.
 - Failure to score at least 75% on any comprehensive exam will result in the student being ineligible to re-enter the program.
 - Below is a schedule of which comprehensive exams will need to be taken by semester:

Core Competency Testing

Semester Offered	Progression Course	Competency will be tested on:
	RADS 2012 INTRO MED IMG & TERM P	Lecture only
Spring II	RADS 3133 IMAGING PATHOLOGY P	Lecture only
	RADS 4613 ETH & LEGAL ISS IN MED IMG P	Lecture only
Summer II	RADS 3513 PHYS & EQUIP IN MED IMG P	Lecture only
	RADS 3043 RAD PROCEDURES I P	Lecture and Lab
Fall III	RADS 3243 PATIENT CARE P	Lecture only
	RADS 3763 RAD PROT & BIOL RESPONSE P	Lecture only
	RADS 3033 IMAGE ACQ & PROC P	Lecture only
Spring III	RADS 3053 RAD PROCEDURES II P	Lecture and Lab
	RADS 3063 RAD PROCEDURES III P	Lecture only
Summer III	RADS 4114 CLINICAL EDUC I P	Lecture only
Eall IV	RADS 4215 CLINICAL EDUC II P	Lecture only
Fall IV	RADS 4912 SPEC TOPICS P	Lecture only
Coming IV	RADS 4315 CLINICAL EDUC III ^p	Lecture only
Spring IV	RADS 4332 RAD TECH SEMINAR P	Lecture only

Prior to reentry to the program, students must test out of all RADS progression courses. 'Test out' means to score 75% or higher on a comprehensive exam from each RADS progression course to determine whether or not information has been retained. Failure to score at least a 75% on a comprehensive exam for ALL progression courses previously passed will result in the student being ineligible to re-enter the MSU Texas BSRT program.

BSRT Graduation Requirements

- Complete all Academic Foundations and Core Curriculum requirements for a BS degree. Click here for details on <u>requirements</u>.
- Earn a grade of C or better on all RADS prefix coursework except RADS 4123 Data Analysis.
- Satisfy all general requirements for graduation including the Writing Proficiency Exam.
 - Note: Students who complete RADS 3523 during or after Fall 2021 and RADS 4913 during or after Spring 2022 no longer have to take the WPE.
- Apply for graduation. Click here for details.
- Satisfy all BS requirements for graduation.
 - Note: All BS degree graduation and BSRT program requirements must be met before the department chair can verify eligibility to sit for the ARRT Radiography Exam.

Bachelor's Degree Requirements Curriculum (2022-2023 Catalog)

Required RADS courses	73 Sem. Hrs.	(See 2022-2023) Degree plan for details)
Basic Core	47 Sem. Hrs.	(See 2022-20223) Degree plan for details)
Total	120 Sem. Hrs.	

Professional Curriculum (73 Semester hours)

- RADS 2012 Intro to Medical Imaging and Terminology
- RADS 3033 Image Acquisition Procedures
- RADS 3043 Radiologic Procedures I
- RADS 3053 Radiologic Procedures II
- RADS 3063 Radiologic Procedures III
- RADS 3133 Imaging Pathology
- RADS 3213 Advanced Clinical Practice Skills
- RADS 3243 Patient Care
- RADS 3513 Physics and Equipment in Medical Imaging
- RADS 3523 Essentials of Research
- RADS 3763 Radiation Protection and Biologic Response
- RADS 4002 Image Analysis
- RADS 4114 Clinical Education I
- RADS 4215 Clinical Education II
- RADS 4315 Clinical Education III
- RADS 4332 Radiologic Technology Seminar
- RADS 4533 Informatics
- RADS 4613 Ethics and Legal Issues in Medical Imaging
- RADS 4633 Continuous Quality Improvement

- RADS 4733 Cross-Sectional Anatomy
- RADS 4912 Special Topics
- RADS 4913 Applied Research

Professional Electives (Must take any 2)

- RADS 4513 Administration & Supervision in Medical Imaging
- RADS 4703 Principles of Computed Tomography
- RADS 4743 Magnetic Resonance Imaging
- RADS 4753 Mammography
- RADS 4763 Mammographic Quality Practices
- RADS 4773 Magnetic Resonance Imaging Applications
- RADS 4783 Computed Tomography Applications
- RADS 4813 Teaching Strategies in Imaging Sciences
- RADS 4853 Essentials of Forensic Medical Imaging
- RADS 4863 Essentials of Teaching in Imaging Sciences

General Core Courses (47 Sem. Hrs.)

(See 2022 or later degree plan for details)

- Anatomy and Physiology I & II (8 Sem. Hrs.) MSU BIOL 1123 & 1234
- Government/Political Science (6 Sem. hrs) MSU POLS 1333* & 1433
- Communication 010 A/010 B (6 Sem. hrs)
- American History (6 Sem. hrs) MSU HIST 1133 & 1233
- Mathematics (3 Sem. hrs college level)
- Creative Arts (3 Sem. hrs)
- Social & Behavioral Science (3 Sem. hrs)
- Language, Philosophy & Culture (3 Sem hrs)
- Component Area
 - o Cultural & Global Understanding (3 Sem. Hrs)
 - o Undergraduate Inquiry & Creativity (3 Sem. Hrs)
- Statistics (3 hrs) Students may take any section of RADS 4123 Data Analysis to satisfy this requirement

*American Government I, 3 semester hours, must be taken from a Texas college or university. This course is available online from MSU, as are most of the general academic requirements. If one government course is taken from MSU, the other must be as well as they do not transfer in.

COVID-19 Policy

The student will follow the current university policy on COVID 19. The student should visit

Coronavirus »MSU Texas »

Clinical site requirements may vary. The need for a Covid 19 vaccination is dictated by the clinical site where the student is assigned.

Complaint Policy

It is the policy of the Midwestern State University Radiologic Technology program to work with students in finding fair and equitable solutions to problems apart from those invoking the grievance procedures.

- Step 1: The student should first take their problem or question to their course faculty instructor(s). Usually the instructor will have direct knowledge about the subject and is best qualified to resolve the situation.
- Step 2: If the student and instructor are unable to find a solution or answer within a reasonable amount of time, the student may then bring the matter to the attention of the Department Chair. The student should feel free to discuss the matter fully.
- Step 3: Should a satisfactory and impartial solution not result from Step 2, the student may pursue the matter through the College Dean.

All students will have the option of appointing a person to accompany them during the complaint procedure. Involved faculty should include the student's faculty advisor during the complaint procedure or designate another faculty member if the advisor is not available or is directly named in the complaint.

Grievance Policy

The purpose of this policy is to establish a process by which students may address general issues that do not fall under formal grievance policies. In an effort to expedite resolution to complaints, students will be requested to first follow the Informal Complaint Process. If resolution does not occur via the Informal Complaint Process, the student may follow the Formal Complaint Process.

Informal Grievance Process

The informal complaint process promotes dialogue and understanding, and provides a framework to expedite resolution. It additionally promotes student development through self-advocacy and open communication. Prior to filing a formal complaint, the student must use the following informal procedure. The Informal Complaint Process is initiated in the office of the Dean of Students.

• The student should discuss with the Dean of Students, or designee, the nature of the complaint in order to determine the most appropriate and expeditious manner of

- addressing said complaint. The Dean of Students, or designee, and the student determine the faculty or staff member best equipped to address the complaint. The comfort of the student in addressing the complaint with any member of the faculty or staff is considered.
- The Dean of Students, or designee, will assist the student in contacting the faculty or staff best equipped to handle a complaint. The student should discuss the complaint thoroughly with the determined faculty or staff as soon as practical. Both parties should openly discuss the issue and attempt to explore a mutually satisfactory outcome.
- The Dean of Students maintains a log of Informal Complaints registered with their office. This log includes the student's name, contact information, nature of complaint, and complaint referral, if necessary.
- Within five days of logging the complaint, the Dean of Students, or designee, will followup with all parties in order to determine the disposition of the complaint. The disposition will be included in the complaint log.
- If the complaint is resolved, the process ends.
- If the complaint is not resolved, the student may initiate a Formal Complaint Process.

Formal Grievance Process

A formal written complaint may be issued if the Informal Complaint Process does not produce resolution. The student is encouraged to contact the Dean of Students office prior to submitting a formal complaint so that they can be well-informed of the formal complaint process. The student must use the following formal complaint procedure:

- The student must submit in writing to the appropriate Dean, Director, Chair, or Supervisor, as determined in consultation with the Dean of Students, an outline of what occurred, any witnesses to the alleged event, and the desired outcome of the complaint.
- The appropriate Dean, Director, Chair, or Supervisor, with guidance from the Dean of Students, interviews all affected parties and witnesses.
- Within seven business days of receiving the written complaint, the Dean, Director, Chair, or Supervisor issues a written decision regarding the complaint.
- If the complaint is resolved the process ends.
- If the complaint is not resolved, the affected student may appeal the decision to the appropriate Vice President. The Dean of Students will assist the student in making this determination. The appeal must be in writing, no later than seven business days after receipt of the final disposition of the formal appeal.
- The Vice President will consider the appeal and issue a decision to the student in writing. A copy of the final resolution will be sent to the student and the Dean of Students.

Scholastic Appeals Committee

It is the responsibility and the prerogative of every faculty member to determine grades in those courses to which they are assigned. Except in accordance with stated university policies, no other individuals or group can make these decisions.

The only two bases on which a student can legitimately appeal a course grade and/or suspension from an academic program are:

- 1. The student has not been evaluated according to the same criteria as his or her classmates, OR
- 2. An error has been made in grading and/or posting.

The procedure for requesting a course grade change and/or retention in an academic program is as follows:

- 1. The student must consult with the appropriate instructor, unless the instructor is no longer on staff.
- 2. If this does not resolve the problem, the student should present a formal written appeal to the dean of the college in which the course was taught. This must be done no later than thirty (30) calendar days from the first day of the next long semester. In cases where the student was terminated from a program, the student should submit his or her petition for reinstatement to the dean of the college in which the program is located. The dean should immediately request a written response to the student's complaint from the faculty member.
- 3. Within ten working days from receipt of the appeal, the dean of the college should respond to the student in writing as to his or her disposition of this appeal.
- 4. Should the appeal not be disposed of by the dean of the college in a manner satisfactory to the appellant, the appeal may be presented to the university's Academic Appeals Committee. In such cases the following procedures should be followed:
 - A. The student should obtain from the Office of the Provost a REQUEST FOR HEARING form and a copy of this policy. The student should fill out the form carefully and submit it, along with all other information pertinent to the student's position, to the Provost. These materials will constitute the student's formal written appeal and will then be forwarded by the Provost to the chair of the Academic Appeals Committee.
 - B. Upon receipt of the appeal, the chair of the Academic Appeals Committee will at once distribute a copy to each member of the Academic Appeals Committee. Within five working days from receipt of the appeal, each committee member will inform the chair of the Academic Appeals Committee in writing whether or not they believe the appeal has established, on its face, at least one of the bases for appeal as noted above.
 - C. If a simple majority of committee members finds no basis for the appeal, a hearing before the Academic Appeals Committee shall be denied, and the chair of the committee will at once inform the Provost of this decision in writing. The Provost should then inform the student by letter that the appeal has been denied because it did not meet either of the stated bases for appeal.
 - D. If, however, a simple majority of the Academic Appeals Committee finds that the appeal appears to have a basis, then the chair will as soon as possible inform the student, the faculty member, and the dean of the college that a legitimate appeal has been filed and of specific procedures to be followed. The chair will also provide copies of the appeal to the faculty member and the dean of the college and by the same letter will inform the faculty member (or in certain situations noted as follows, the dean of the college) that they have ten working days in which to respond in writing to the Academic Appeals Committee.

Both the student petitioning for a hearing by the Academic Appeals Committee and the faculty member involved have the right to challenge one member of the committee. This is a peremptory challenge, and the chair will choose a replacement from among the alternate members of the committee. The initial correspondence between the chair of the committee and the principals should specify this right and request prompt written response.

In cases where the appeal concerns the performance of a teaching assistant or part-time faculty member, the dean of the college or other full-time faculty member directly responsible will represent the university before the Academic Appeals Committee. A teaching assistant or part-time faculty member may appear before the Academic Appeals Committee. In cases where the faculty member responsible is not available, the dean of the college involved will represent the university.

- E. Upon receipt of the faculty member's written response, the chair will provide copies to all members of the Academic Appeals Committee and to the appellant and will schedule a meeting of the Academic Appeals Committee.
- F. The first meetings of the committee should be within ten working days from receipt of the faculty member's response. At the written request of the student, the committee may consider the case based on the student's written appeal without an appearance by the student before the committee.
- G. The number of meetings necessary to reach a decision will be dictated by each individual case. However, general guidelines are provided:
 - 1. Both parties involved reserve the right to bring information considered pertinent before the committee. This may include, but is not limited to written documents as well as orally presented information from designated individuals. Although these hearings are considered informal, reasonableness and fairness should prevail in this area.
 - 2. No representation of the student by legal counsel, parent, or other representative or of the faculty member by legal counsel or other representative except the dean of the college, where warranted, is entertained by the committee.
 - 3. Testimony from the parties involved should be taken independently, thereby avoiding any open confrontation, which could be detrimental to the proceedings.
 - 4. In its deliberations, the committee should seek to focus only on the issue of the grade appeal or retention in the program in question.
 - 5. Likewise, the committee's final recommendation should deal only with these issues.
 - 6. Prior to the proceedings, copies of all written or recorded evidence to be considered must be made available to all parties involved (student, instructor, and dean of the college). Additionally, any party specifically mentioned in a written document will be provided access to that document or the portion thereof relating to that party.
- H. Once the committee has reached a decision, a letter communicating this decision should be delivered to the Provost within ten working days. In addition, a summary of the proceedings outlining all pertinent points and reasons for the

- decision should be attached as well as the original petition from the student and the faculty member's response. Any minority opinions from the committee should also be attached.
- I. If the committee has rendered a decision favoring the faculty member, the Provost should communicate this by letter to the appellant with a copy to the faculty member. If the decision rendered recommends a grade change, the Provost should write a letter to the faculty member with a copy to the dean of the college requesting the faculty member's intended action.
- J. Should the faculty member decline to change the grade, the Provost may, based on the Academic Appeals Committee's recommendation, change the grade by administrative action to the specific grade recommended by the committee. If there is an administrative grade change, the student's transcript will reflect this. In addition, on request from the Provost, the committee may reconsider its findings and recommendations. However, once the committee's decision has been accepted by the Provost along with the other documents specified above, the committee's work will be considered complete.

DISCIPLINARY ACTION

Any infraction of the policies of the Midwestern State University, the BSRT Program and/or any infraction of the policies and regulations of the hospital in which the students are assigned will warrant disciplinary action. The type of action taken will depend upon the seriousness of the infraction.

The involved BSRT Faculty and/or Department Chair will convene to discuss any infraction listed above except those involving grades. A student in the clinical or academic environment may be suspended until the infraction is able to be investigated. The Faculty and/or Department Chari will meet within 48-72 hours of the suspension depending on the day of the week it occurred. All applicable parties involved will be able to present the evidence of the infraction. The Department Chair may meet with the student, the parents (providing student has signed a FERPA waiver), and/or any other involved parties.

Disciplinary action will result if a student is cheating in the classroom or lab during tests, cheating with actual clinical attendance, or inappropriate behavior (i.e., drugs, evidence of alcohol, stealing, excessive tardiness, poor attendance, and non-compliance with policies). Incidents of policy and/or procedure violations can also be subject to disciplinary action even if the occurrence is off campus (for example, the inappropriate use of social media such as Twitter, Facebook, Snap Chat, etc. or drunk driving, arrests, coming to class intoxicated, etc.). Discussing an incident on social media may also be subject to disciplinary action. See list below under Dismissal.

The BSRT Faculty reserves the right to recommend dismissal of a BSRT student when health and/or personal conduct requires such action. If the student challenges the decision of being dismissed from the program, they may challenge the due process at the College level. Refer to Grievance Policy.

If the problem should develop within the academic setting, the issue will be reported to the Department Chair by either a student or Faculty member. Issues such as physical hands-on fighting, pushing, verbal abuse, blatant disregard of policies and procedures, and ethical violations may result in dismissal from the program.

If the problem should develop within the assigned hospital or clinical affiliate, they will notify the clinical coordinator and Department Chair. This notice shall define the problem and any circumstances surrounding the infraction.

Depending on the severity of the infraction, the student may be dismissed immediately without previous warnings.

Disciplinary action in the academic or clinical setting shall fall into one of the following categories:

First Warning

This is *verbal* notification to a student that they have violated a policy of the student handbook. If a repeated violation occurs, then a second written warning will result. Documentation of the verbal warning will be placed in the student's academic file.

Second Warning

This is a *written* notification to a student that they have violated a policy of the student handbook. This warning does NOT have to be for the same type of violation that warranted the First Warning. Written documentation is prepared and entered into the student's academic/clinical file with signatures of all parties involved.

Verbal and written warnings are cumulative from one semester to another. Any further policy violations of any kind occurring after a second warning has been given to the student may result in dismissal from the program.

Dismissal

The student will be dismissed from the BSRT Program for infractions of program policies. Dismissal may be permanent or of a defined period as indicated by meeting with the student and in a letter to the student.

Dismissal from the BSRT program may occur for reasons including but not limited to:

- Repetitive performance of unsafe behaviors during clinical experiences.
- Performance of unethical or illegal behaviors during clinical experiences.
- Failure to comply with clinical agency policies and regulations.
- A deliberate attempt to cover up any error or negligent performance during clinical experiences.
- Cheating or plagiarism (see MSU Texas' Academic Dishonesty Policy & Procedures in the Student Handbook)
- Violation of the MSU Texas Code of Student Conduct.
- A positive report on any random drug screen.
- Failure to follow the guidelines of the BSRT program's Professional Conduct/Behavior policy
- Being asked not to return by ANY of the assigned clinical settings where clinical experience is being achieved.
- Committing a breach in the BSRT program policy on the conduct of social media usage.
- Committing a breach of patient or agency confidentiality by inappropriate management of information in any form.

RADIOLOGIC SCIENCES LABORATORY SAFETY GUIDELINES

The program has polices/procedures for appropriate laboratory use for energized labs.

Policies and procedures regarding the energized laboratory on campus are located in the Midwestern State University Radiologic Sciences Classroom & Laboratory Safety Guidelines. Students are instructed in the energized lab prior to any clinical experiences. These instructions include how to reduce patient exposure through positioning and patient care instructions. Students are required to sign an agreement thus documenting that they have received and read the handout on safety policies and that fully understand them and will comply with everything they have read. The signed agreement for each class is kept on file in the X-Ray Compliance Manual available from the Radiation Safety Officer. A digital copy of the signed agreement is also kept.

Concealed Carry in Laboratories

Participation in Radiologic Sciences laboratory classes often require students to wear "scrubs" which are thin garments which may make concealed carry of a firearm difficult if not impossible. In addition, students are often required to palpate other students while simulating medical examinations or procedures. This required physical contact may also make concealment of a firearm difficult. While concealed carry is not prohibited in any Radiologic Sciences laboratory, students are reminded that intentional display of a firearm may result in criminal and/or civil penalties and unintentional display of a firearm is a violation of university policies and may result in disciplinary actions up to and including expulsion from the program and university. Students should factor the above in their decision as to whether or not to conceal carry in Radiologic Sciences laboratories.

Supervision in the Laboratory Setting

Students will not perform any procedures in the laboratory without supervision, either direct or indirect. Direct supervision takes place until the designated instructor of the course or laboratory activity determines the student is competent to perform under indirect supervision. Indirect supervision requires an instructor to be within speaking distance. *All mobile and fluoroscopic procedures will be performed under direct supervision*.

WORKPLACE HAZARDS

Radiation Monitoring

It is the goal of this program to keep radiation exposure to students as low as reasonably achievable.

NCRP Report # 102 will be used to establish maximum dose values.

Laboratory Setting

- a. The students meet with Radiation Safety Officer (RSO) during the first lab for the Fall III semester to go over the *Operating and Safety Procedures*. The students sign the equipment operator statement which documents they have read the procedures and agree to follow them. The signed agreement for each class is kept on file in the X-Ray Compliance Manual available from the RSO.
- b. Radiation monitoring badges will be obtained for each starting class in sufficient time for them to be available the first time students use the energized laboratory.
- c. Radiation monitoring badges are to be worn any time students are working in the energized lab on campus or at the clinical affiliate to which they are assigned.
- d. Students will wear the radiation monitoring badge at collar level in front, outside of the protective apron. Also, the radiation monitoring badges will be worn during each laboratory session utilizing the energized laboratory, regardless of whether or not exposures are being made.
- e. Radiation monitoring badge should not be allowed to get wet.
- f. Radiation monitoring badges will be returned to the storage rack when the laboratory session is completed. Under no circumstances should the radiation monitoring badge be taken off the second floor of Centennial Hall. It is permissible for students to keep radiation monitoring badge on while on break from lab as long as the student remains on the second floor.
- g. Quarterly radiation monitoring badge reports will be reviewed by the MSU Radiation Safety Officer and students are to initial report indicating knowledge of exposure. The reports will be kept on file by the MSU Radiation Safety Officer and will be available for students' inspection at any time.
- h. The MSU Radiation Safety Officer will conduct an investigation if a student's exposure for a 30-day period is over a negligible reading (0.01 mSv) or over 0.024 mSv in a 90-day period. Results of the investigation will be documented and given to the Department Chair.

Occupational Safety and Health Administration (OSHA) is an agency of the United States Department of Labor. It was created by Congress to prevent work-related injuries, illnesses, and deaths by issuing and enforcing rules (called standards) for workplace safety and health. OSHA aims to ensure employee safety and health in the United States by working with employers and employees to create better working environments. Students are educated about workplace hazards included but not limited to the following:

- Standard precautions
- Communicable disease awareness
- Fire safety
- Hazardous materials (chemical, electrical, bomb threats, etc.)
- Blood-borne pathogens

A "Notice to Employees" from the Texas Department of Health is posted in the radiography lab area. This document provides employees with specific information on the hazards of chemicals to which employees may be exposed. A list of hazardous chemicals with the material safety data sheets (MSDS) is kept in the lab and is available to employees and students upon request.

Pregnancy Policy

The Pregnancy Policy is consistent with applicable federal regulations and state laws. Every effort will be made to protect the well-being and privacy of the student. All students are informed of the risks of radiation exposure during pregnancy and have the option of declaring their pregnancies or not. A student may voluntarily notify the MSU Radiation Safety Officer and Department Chair, *in writing*. A form is available from the MSU Radiation Safety Officer for pregnancy declaration.

After declaring pregnancy, students may select from the following options:

- Continuation in the program with no special considerations made in any way.
- Rescheduling of potential high exposure rotations during the pregnancy taking into consideration other student's access to equitable clinical experience.
- Reduction and/or change of clinical hours during the pregnancy with provided documentation by a licensed healthcare provider.
- Take a leave of absence from the program for any desired portion of the pregnancy due to radiation safety and/or health concerns with provided documentation by a licensed healthcare provider.

Other options or combinations of the above will be considered in consultation between the student, MSU Radiation Safety Officer, and Department Chair.

Conditions

- During the first two semesters, the MSU Radiation Safety Officer and the Laboratory Instructors will be sure the student is monitored during laboratory classes.
- During the final three semesters the MSU Radiation Safety Officer, the Clinical Coordinator(s), and the Clinical Preceptor will be sure the student is monitored during clinical hours.
- Pregnant students will be provided an additional personal monitor to be worn at waist level under any lead apron (when applicable) and be identified as the fetal dose monitor.
- If the fetal dose monitor is over a negligible reading (0.01 mSv) in a 30-day period, the student will be removed from clinical assignments in radiation areas.

- If the student exceeds the maximum permissible dose, the student will be withdrawn from all clinical courses for the remainder of the pregnancy.
- A student may rescind a pregnancy notification in writing at any point for any reason without explaining the reason.
- Attendance, absence, and make-up policies will be equally enforced.

Depending on the length of time the student is away from the program because of leave due to pregnancy and the status of the student's progress in the program, it may be necessary for the student to extend their education beyond the normal program requirement timeframe or restart the program in order to meet all program requirements for graduation. This will be determined on a case-by-case basis by the department chair.

Exposure of Insulin Pumps and Continuous Glucose Monitors to Magnetic Fields and Radiation

Students with insulin pumps and continuous glucose monitors (CGM) must take them off when in the room during fluoroscopic or radiographic procedures, MRI scans, CT scans, hybrid imaging using CT or MRI, or diathermy treatments. These procedures can make the insulin pump, sensor, transmitter, meter, and remoted control nonfunctional or damage the part of the pump that regulates insulin delivery, possibly resulting in over delivery and severe hypoglycemia. CGMs have not been tested during the above procedures and the manufacturer recommends not using them under these conditions. If your pump is inadvertently exposed to a magnetic field or ionizing radiation, discontinue use and contact the manufacturer of the device immediately. If your CGM has been exposed, confirm readings with standard finger-stick glucose monitors and contact the manufacturer. Do not use pump cases that have a magnetic clasp. Exposure to a magnetic clasp may interfere with the motor inside the pump. https://wchh.onlinelibrary.wiley.com/doi/full/10.1002/pdi.2142 https://diabetesjournals.org/care/article/42/1/e14/36238/Comment-on-Umpierrez-and-Klonoff-Diabetes

Magnetic Resonance Imaging (MRI) Screening

Prior to entering the clinical environment, the program designates a time period for instruction on MRI safety guidelines and/or provides an instructional video.

Before any student is allowed to perform a rotation in MRI, the MRI screening form must be completed and reviewed by the Clinical Coordinator, Clinical Preceptor, and the MRI supervisor. If a student is contraindicated to perform a rotation in the MRI area, the Clinical Coordinator will adjust the student's clinical requirements to ensure the safety of the student. If there are any changes in the status of this screening form, the student must immediately notify the program. JRCERT Standard 5.3

Venipuncture

Venipuncture is a procedure commonly performed at the clinical education setting. Venipuncture training occurs in the RADS 3243 Patient Care class. This practice is required as an ARRT clinical competency requirement. Students in the professional curriculum may perform

venipuncture if approved by the clinical site after appropriate training.

All angiocath training and testing will be performed in the Simulation Center.



Midwestern State University
BSRT – Entry Level Program
Part II: Clinical Handbook
2024

(Graduates of 2026)

THE CLINICAL ENVIRONMENT

Introduction

The student's clinical experience will be different from the academic environment in which they are accustom. The success of the student to function and learn in the clinical setting depends, in part, on how they approach and deal with the differences.

Patient care is of utmost importance in the radiology department. The <u>patient's welfare is</u> <u>considered first above all other considerations</u>. The first priority of patient care is consistent with the goals and needs of clinical education. Occasionally, this reality dictates the scheduling and conducting of educational activities be flexible.

Compared to the learning activities conducted on campus in the classroom setting, the learning activities in the clinical setting are frequently less structured. The student must take a more active and **responsible** role for integrating the academic preparation with the individual examinations being observed and/or performed.

Generally, in the classroom setting, students work independently as they pursue their academic goals. In the clinical setting, the student must pursue their educational goals within the overall goals of the department to deliver quality patient services efficiently and effectively. Rather than function independently, the student becomes a part of a health care delivery team and must function cooperatively to achieve educational and departmental goals.

Another difference between the academic environment and the clinical environment is the student's performance of an examination to produce a diagnostic image. When students produce diagnostic images of acrylic phantoms in the on-campus laboratory, the attention is narrowly focused on the mechanics of producing the diagnostic image. Since live patients are not exposed to produce images in on-campus laboratory learning, there was no need to be concerned or cautious about the welfare of the "patient." In the clinical situation, students must develop the ability to expand their awareness of the patient as a person as well as the mechanics of producing diagnostic images of optimum quality.

Clinical skills can be developed by following a systematic step-by-step approach. The following sequence of steps will generally produce outstanding technologists:

- Academic Preparation
- Observation
- Assisting and Performing Examinations under the Supervision of a Qualified Radiologic Technologist
- Competency Evaluation
- Performance Maintenance

Academic Preparation

The student is considered academically prepared by successfully completing didactic courses in imaging physics, imaging principles and techniques, anatomy and physiology, diagnostic imaging positioning, etc. before entry into the clinical environment.

Observation

The student's initial activities in the clinical environment will consist primarily of observing qualified radiologic technologists at work.

Assisting and Performing Examinations under the Supervision of a Qualified Radiologic Technologist

Once the student is comfortable in the diagnostic imaging exposure room, they will be given an opportunity to assist and perform diagnostic imaging procedures under the supervision of a qualified radiologic technologist. Students will not perform diagnostic imaging examinations without direct supervision until competency on the selected examination is obtained. *Exception:*No fluoroscopic or mobile procedures may be performed by a student without DIRECT supervision of a qualified technologist.

Competency Evaluation

When the student believes they are able to perform a particular examination by themselves, the student will ask the Clinical Preceptor or a qualified radiologic technologist to perform a competency evaluation for the examination when the next patient for the selected examination arrives. The student's performance will be documented on a Competency Evaluation Form. If competency is achieved on the selected examination, the student will be marked as competent on the Competency Form and the list of competency examinations. If competency is not achieved, the examination must be repeated until competency is achieved. Additionally, all diagnostic images submitted as completed competencies will be visually evaluated by the Clinical Coordinator or Assistant Clinical Coordinator. Final approval of competency evaluations will be by the Clinical Coordinator or Assistant Clinical Coordinator, regardless of prior approval by Clinical Preceptor or their designee.

Performance Maintenance

Once the student passes the Competency Evaluation for a particular examination, the student will need additional practice to maintain and perfect their skill. The student may now perform the examinations in which they have shown competency with indirect supervision (a qualified radiologic technologist must be in an adjacent room or area but not necessarily in the exposure room). However, if a repeat examination should become necessary for factors over which the student had control, a qualified radiologic technologist must be present to provide direct supervision. The student must have the qualified radiologic technologist who was present for the repeat performance of the examination initial their logbook, thus documenting the technologist was present for the repeat performance.

When the student is assigned or rotates to another room, the student should have an updated competency list to show qualified technologists which exams must be performed with direct supervision.

CLINICAL POLICIES AND PROCEDURES

In an effort to promote excellence in the professional and ethical conduct of students and to provide the highest quality of medical care for patients, the following policies are currently in effect for students in the Midwestern State University (MSU) Bachelor of Science in Radiologic Technology (BSRT) program.

Before Placement at Clinical Site

Background Check

Some clinical affiliates require background checks in addition to those done when students entered the program. If placed at one of these clinical sites, students must follow all requirements. See the Clinical Coordinators for more information.

Cardiopulmonary Resuscitation Certification (CPR)

This requirement is fulfilled prior to the first positioning lab. See Part I of this handbook for more information.

Student Malpractice Coverage

BSRT students must carry professional liability insurance during the clinical education phase of the training. Students will purchase on the MSU BSRT webpage through the Program Fees link and submit receipt to the Castle Branch Document Management system. The liability insurance is effective on the day clinical education begins and ends on the day the BSRT program is completed. The coverage is only valid during the student's scheduled clinical hours. The cost of the insurance is approximately \$18.00 per academic year or any portion of the academic year. Students pay for this insurance the semester before the start of clinical education. Failure to upload receipt of purchase to the CastleBranch Document Management system will result in the student being ineligible for clinical participation.

Health Insurance

This requirement is fulfilled prior to the first positioning lab. See Part I of this handbook for more information.

Immunization Requirements

This requirement is fulfilled prior to the first positioning lab. See Part I of this handbook for more information.

Clinical Assignments

Because of the locations of the clinical education centers and all centers are full-service medical

facilities, students are assigned to only one major affiliate institution for the duration of the clinical education. Students are rotated to other affiliates as needed to satisfy learning objectives.

Clinical site assignment will be determined by:

- Recommendations from faculty
 - 1. Performance
 - 2. Integrity
 - 3. Attitude
 - 4. Ability to work as a team member with faculty and students
- Site availability
- GPA ranking at the end of the third professional semester (professional courses and Anatomy & Physiology I & II courses)
- MSU cumulative GPA
- Hometown
- Date of submitted application (used as a tie-breaker)
- On campus athlete, band, or international student working on campus (must be approved by Clinical Coordinator)
- Student preference for clinical sites

The students will declare clinical site preferences at the end of the fall semester, and the program will announce assignments at the beginning of the spring semester. Opportunities to transfer, if available, will be made known approximately 60 days before clinical education begins. Clinical sites are located in a wide geographic area in addition to Wichita Falls. Students are responsible for their own transportation, housing, and living expenses during their off-campus clinical courses. Additionally, students must also arrange to have Internet access while enrolled in online courses off-campus.

Situations may arise during the clinical experience that may necessitate a transfer to another clinical site. The BSRT program will make every effort to make the transfer as easy as possible. Any expenses incurred because of this transfer will be the sole responsibility of the student.

Obtaining Clinical Competencies

During the course of clinical education, the student may need to rotate to an additional clinical site to obtain competencies that are not normally observed at the currently assigned site. The student will incur any additional expense of this change; however, appropriate notice will be given so financial arrangements may be made.

Transportation Policy

It is the student's responsibility to provide their own travel to and from class and clinical education sites. Neither the college nor the clinical sites assume any responsibility or liability for student transportation needs.

During Clinical Rotation

Responsibilities of Students in the Hospital

The primary function of the hospital is patient care. Under no circumstances should the presence of students reduce the quality of patient care. It is the student's responsibility to:

- Follow the administrative policies established by the radiology department and the hospital.
- Students must report to the assigned work center at least 10 minutes prior to the scheduled time clinical time.
- Notify the Clinical Preceptor and Clinical Coordinator no later than 30 minutes before the student's scheduled time in case of illness or absences which are beyond the student's control.
- Wear radiation monitoring badge as outlined in the handbook.
- Check with radiologic technologists and/or Clinical Preceptor before leaving the assigned work center.
- Follow the directions provided by the radiologic technologists and/or Clinical Preceptor
- Ask for advice when indicated. DO NOT experiment with patients. Be proactive and ask questions.
- Do not discuss clinical information with patients, relatives, or anyone outside the radiology department.

Professional Behavior Policy

As a representative of the MSU BSRT program, the assigned clinical institution, and the entire profession of the radiologic sciences, the student will maintain the highest standards of professionalism.

Students are expected to conduct themselves on a professional level. Professional conduct is reflected in attitude and in communication with physicians, supervisors, co-workers, and patients.

Professional conduct includes, but is not limited to:

Commitment to Excellence

- refraining from performing any professional service which requires competence one does not possess;
- striving to exceed expectations at all times;
- committing to life-long learning by taking responsibility for one's own learning and accurately reflecting on the adequacy of one's knowledge, skill development and personal barriers to accomplishing learning and growth;
- taking responsibility for learning in group settings by being present, prepared and engaged;
- striving for mastery learning appropriate for one's level of training;
- reflecting with colleagues on the success of group work.

Honesty and Integrity

- identifying truthfully and accurately one's credentials and professional status
- communicating appropriately in an honest and timely manner;
- accurately representing actions and events;
- avoiding cheating, plagiarism, misrepresentation of the truth;
- reflecting on one's personal reaction to encounters with others and accepts responsibility for personal actions;
- recognizing, appropriately disclosing and managing conflicts of interest; is forthcoming with information; does not withhold and/or use information for power;
- admitting mistakes.

Compassion

- recognizing and responding to the fears, suffering and hopes of patients and their families;
- assisting colleagues in dealing with the challenges of professional work.

Respect for Others

- · respecting confidentiality of patients;
- recognizing and respecting personal and sexual boundaries;
- avoiding bias (e.g. biological sex, gender, religion, nationality, race, age, sexual
 orientation, gender identity) in interactions with others; articulate and embrace the
 many positive aspects of difference among people and demonstrating awareness
 of how such differences affect personal interactions;
- demonstrating a commitment to resolving conflicts in a collegial manner;
- showing sensitivity and respect for the needs, feelings, ideas, and wishes of others in clinical and education settings;
- demonstrating humility in interactions with others;
- recognizing that appropriate dress and appearance demonstrate respect for others and for the profession.

Professional Responsibility

- is present and punctual for scheduled activities;
- taking responsibility to notify others for unavoidable absence or tardiness;
- coping with the challenges, conflicts, and ambiguities inherent in professional work;
- identifying and appropriately dealing with problematic behaviors of oneself and colleagues;
- being cognizant of and adhering to the chain of command;
- appropriately displacing clinical responsibilities when personal needs demand it;
- adhering to established professional codes of conduct;
- practicing according to accepted standards of care;
- identifying ethical issues in professional situations and acts in an ethical manner;
- regarding as strictly confidential, all information concerning each patient and

refraining from discussing this information with any unauthorized individual, including the patient.

Social Responsibility

- understanding and actively addressing the multiple social factors that threaten the health of patients;
- actively working for appropriate social change to improve the health of populations;
- modeling healthy behaviors.

Altruism

- placing the interests of others above self-interest;
- being able to give up some personal needs to meet needs of patients.

Examples of unprofessional behaviors include, but are not limited to:

- gossip
- disclosure of medical information with patients or relatives
- discussions pertaining to clinical in public areas (e.g. elevators, cafeterias)
- discussions of inappropriate subject matter within hearing of patients, visitors, etc.
- consumption of food in patient areas (including gum)
- excessive noise
- inappropriate jokes
- loitering

In addition, the student will adhere to the following policies while at the clinical facility:

- 1. Smoking, smokeless tobacco, vaping, eating, drinking, or chewing gum is permitted only in designated areas.
- 2. Students will not leave their assigned area at any time without permission.
- 3. Students will not remain in the radiology department after clinical hours unless authorized.
- 4. When not actively engaged in diagnostic imaging work or other duties, students will make wise use of time to study or update Trajecsys logs and will not congregate in offices, halls, or other rooms.
- 5. Personal telephone calls are not encouraged. No one will be called from the working area except in an emergency.
- 6. Patients will not be left unattended.
- 7. Electronic devices, such as cell phones, are not permitted in patient care areas.
- 8. Students will wear uniforms *ONLY* during assigned clinical hours or for required campus activities.

Students are responsible for their own actions and must not engage in any activities considered unprofessional or non-conducive to proper patient care. Failure of a student to maintain a professional conduct may result in reduction of clinical grade, course failure, and possible

expulsion from the program.

If a student encounters a problem in the clinical environment, contact the Clinical Preceptor immediately.

Radiation Protection

At no time, during any radiographic procedure, is a student allowed to hold an image receptor. Also, students should NOT hold patients during any radiographic procedure when an immobilization method is the appropriate standard of care. Violations of this policy may result in the disaffiliation of the clinical site and/or the dismissal of the student from the program.

HIPAA

All patient records are confidential in nature. Requests for information concerning a patient should be referred to the supervising technologist or the clinical preceptor. Students are expected to maintain confidentiality in a professional manner.

In accordance with Health Insurance Portability and Accountability Act (HIPAA) of 1996, all patient information will be confidential. Students will maintain the privacy of protected health information by limiting discussion of protected health information to private areas and conference rooms, not discussing health information outside the health care facility unless such discussion is with an appropriate faculty member and in private, not discussing protected health information with other students, and refraining from copying any part of the medical record for use outside of the health care facility. Medical images with all protected health information (PHI) removed may be used for MSU coursework, if allowed by the clinical affiliate.

Students will learn about HIPAA through their didactic coursework and any required orientations at their clinical facility.

Appropriate Use of Social Networking Sites

Social networking websites provide unique opportunities for students to get to know one another, share experiences, and keep in contact. As with any public forum, it is important that users of these sites are aware of the associated risks and act in a manner that does not embarrass the students, the Radiologic Technology Program, and the University. It is also important to ensure patient information is not made publicly available. Students are expected to be respectful of the views and opinions of others in the program and the University. This rule extends to interactions through discussion boards, email, phone conversations, texting, social media, and all other methods of communication. No foul or inappropriate language will be tolerated.

Students are expected to check emails daily for announcements and other program information. Students are expected to use correct English and grammar when writing papers, sending emails, posting to discussion boards, and all other forms of communication.

Posts to social media sites in regards to MSU Texas, its programs, affiliates, faculty, and/or students should be carefully considered. While students are free to post in their own personal accounts, the content of their posts may negatively impact the University and/or its constituents and may warrant disciplinary action.

Inappropriate electronic content (comments, pictures, etc.) that does not reflect the professional behavior expected of professional students may warrant disciplinary action from the program and/or University. Each student is representing MSU and the BSRT Program when logging on to a site and making a comment or posting a photograph.

The Radiologic Technology Program has adopted the following guidelines to assist students in carefully using these sites.

A. Personal Privacy

- Set students' profiles on social networking sites so that only those individuals whom the students have provided access may see one's personal information.
- Evaluate photos of students that are posted to these sites and "untagging" photos that depict the student in what may be construed as compromising situations.
- Be aware of the security and privacy options available to them at any sites where students' post personal information. Keep in mind that privacy settings are not impervious, and information can be shared willingly or unwillingly with others, even with "Friends Only" access.

B. Protection of Patient Information

- Comments made on social networking sites should be considered the same as if they were made in a public place in the clinical setting.
- HIPAA rules apply online, and students may be held criminally liable for comments that violate HIPAA.
- Students should be aware, simply removing the name of a patient does not make them anonymous. Family members or friends of that patient or of other patients the student is caring for may be able to determine to whom the student is referring based on the context.
- Students should not post patient records including images from any modality. Doing so
 is a serious violation of HIPAA, subject to criminal action and dismissal from the
 program.

C. Professionalism

- Use of these sites can have legal ramifications. Comments made regarding care of
 patients or that portray the student or a colleague in an unprofessional manner can be
 used in court or other disciplinary proceedings.
- Statements made under a student's profile is attributable to the student and will be treated as if the student verbally made that statement in a public place.

- Students should use se discretion when choosing to log onto a social networking site at school. The use of these sites during lecture and clinical assignments is prohibited.
- Photographs and statements distributed online are potentially viewable by future employers.
- Students may be subject to disciplinary actions within the University for comments that are either unprofessional or violate patient privacy.

Radiation Monitoring

It is the goal of this program to keep radiation exposure to students As Low As Reasonably Achievable (ALARA). Each clinical site RSO maintains the exposure reports and students are required to review their reading quarterly.

NCRP Report #102 will be used to establish maximum dose values.

- 1. At least one month before students start their clinical education, the Clinical Coordinator will provide each Clinical Preceptor with a list of students who will start clinical. The Clinical Preceptor will ensure a radiation monitoring badge will be available for each student on the first day of clinical.
- 2. Students will wear their radiation monitoring badge when at clinical and will follow the storage policy and other related policies of the clinical affiliate (radiation monitoring badge should remain at affiliate).
- 3. The MSU Radiation Safety Officer will conduct an investigation if a student's exposure for a 30-day period is over a negligible reading (0.01 mSv) or over 0.024 mSv in a 90-day period. Results of the investigation will be documented and given to the Department Chair.

Additional rules to be followed concerning radiation monitoring badge use are:

- 1. Radiation monitoring badges are to be worn any time students are working in the energized lab on campus or at the clinical affiliate to which they are assigned.
- 2. Radiation monitoring badges should not be allowed to get wet.

Workplace Hazards

The Occupational Safety and Health Administration (OSHA) is an agency of the United States Department of Labor to prevent work-related injuries, illnesses, and deaths by issuing and enforcing rules (called standards) for workplace safety and health. OSHA aims to ensure employee safety and health in the United States by working with employers and employees to create better working environments. Students are educated about workplace hazards including but not limited to the following:

- Universal precautions
- Communicable disease awareness
- Fire safety
- Hazardous materials (chemical, electrical, bomb threats, etc.)
- Blood-borne pathogens

Contagious Diseases Policy

Students entering the BSRT Program must be aware, like all healthcare workers, they will be exposed to various contagious diseases during their training and career. Precautions to be taken are outlined in the MSU Patient Care course. Additional information regarding contagious diseases is provided by each clinical facility. The students are encouraged to use any protective devices available.

If the student should be the carrier of a contagious disease, the student must contact the Clinical Coordinator immediately. A temporary suspension of training may be necessary for legal reasons and for the protection of patients.

Most contact will be with patients who have not yet been diagnosed with a contagious disease and therefore, the precautionary procedure of wearing gloves is of paramount importance. Students will use strict isolation techniques if the patient has been diagnosed as having a contagious disease. Students may not refuse to perform radiologic services for patients diagnosed or suspected of having a contagious disease.

Student must use gloves and other protective or precautionary measures (consistent with institutional policies) for all procedures in which there may be contact with body fluids (urine, blood, excretion, saliva, etc.).

The following disciplinary actions will be administered for noncompliance to this policy:

- 1. First offense retraining on universal precautions
- 2. Second offense one day suspension from clinical
- 3. Third offense termination from the program

Professional Appearance Policy

Hospitals and their employees are expected to set examples of cleanliness and appearance. The "Dress Code" of the clinical site will set minimum standards. Students are expected to meet or exceed these standards.

Items listed in the dress code generally include:

- 1. Clean and wrinkle-free uniform.
- 2. Clean shoes.
- 3. Clean hands and fingernails. Artificial nails (acrylic, gel, dipped, etc.) are not allowed*. Color of nails should conform with the clinical site policies.

- 4. Hair must be kept neat and clean and, if long, must be pulled up off the collar. All hairstyles must conform to clinical site policies.
- 5. A mustache or beard is permitted as long as it is kept neatly trimmed.
- 6. Excessive perfume and cosmetics are not permitted as determined by the Clinical Preceptor.
- 7. Only a wedding ring, watch, and one small stud earring in each ear is allowed. Excessive jewelry and facial piercings should be limited for infection control and safety purposes. No necklaces or bracelets or other adornments are allowed (only exception is Med-Alert and religious medallions which are to be worn underneath the scrubs).
- 8. Visible tattoos and other body modifications must be covered or removed if required by the clinical site.
- 9. Articles of clothing required for religious or cultural reasons shall be allowed if in conformity with the clinical site policies.

Specific Uniform Policy

The uniform will consist of the following:

- Program specific colored scrub top and matching scrub pants with embroidered school name and student's first name on top
- White or dark colored shoes with minimal decoration
- Program specific colored lab coat with embroidered* school name and student's first name is optional
- Radiation monitoring badge
- Image markers
- Identification badge issued by clinical site

Proper attire includes all of the items listed above. Each student must have at least three uniforms. If a student is not in proper uniform, the Clinical Preceptor or Clinical Coordinator may send the student home and require the student to return to clinical properly attired. Clinical time missed should be made up the same day. In the event a trip home is necessary, the student will be counted tardy for the day.

At no time are student uniforms to be worn while the student is working as an employee or volunteer of a clinical facility. If working hours are scheduled immediately following clinical hours, the student must change clothing prior to beginning paid or volunteer work.

*Embroidery services will be performed at The Uniform Shop in Wichita Falls, Texas. The staff know the exact requirements of the program and will assist students.

Employment During Clinical Experience

Outside Employment

The BSRT program is aware some students must work; however, classes, including Clinical Practicum, are scheduled with learning objectives in mind so student employment must be scheduled around courses. It is not possible to adjust course schedules for individual employment needs. No student's clinical schedule will be adjusted to accommodate the student's outside employment schedule or their commute to the clinical setting. Students may only perform radiologic procedures outside of clinical courses and for pay when allowed by both state law and clinical affiliate policy.

Student Employment in Health Care Setting

Students employed at any clinical facility or who volunteer time at a clinical facility will not be allowed to receive credit for student time or competencies performed during those working hours. Student time and competencies will only be performed during regularly scheduled clinical hours.

Any student who attempts competencies during paid employee time or any time outside clinical hours may be removed from the program.

During the second clinical semester, students may request a "call back" for competencies not generally seen during regular day time clinical hours. The student can request a "call back" by informing the Clinical Preceptor or a supervising radiologic technologist of the procedure and the student's contact information. "Call backs" can be made provided another student is not already scheduled on a shift requested to be "called back," and the already scheduled student is not in need of the competency in question. The student who receives a "call back" must arrive in the regular Midwestern State University uniform to perform these "call back" competencies.

Students who are performing duties related to their employment must NOT wear any part of the student uniform including any form of student identification or MSU Texas affiliation.

Absence and Tardiness Policy

Two (2) days of clinical absences are allowed each semester. The student must contact the Clinical Preceptor and Clinical Coordinator(s) if they are going to be absent. For each absence above the two allowable absences, the returning student must bring a note from a licensed healthcare provider. The student will be required to make-up the days missed if more than the 2-day allowance. For each clinical day missed over the 2-day allowance, 5 points per absence will be subtracted from the final clinical grade. The student will be required to make up the days missed and the make-up time must start within two weeks. Excessive absences (more than 3) will result in a referral to the Department Chair and/or the Dean of the college and may result in a dismissal from the program. Unexcused absences will not be tolerated. Extenuating circumstances (e.g. surgery, car accidents, death in the family) will be addressed on an individual basis.

Time missed because of tardiness should be made up at the end of the assigned shift the same day. This will still be recorded as a tardy. Three (3) tardies within one semester will result in the deduction of five points from the final clinical grade.

Illness/Injury Guidelines

If the student becomes ill prior to the start of their shift and the student feels they cannot perform their duties or may be contagious, the student should stay home. The student must contact the Clinical Preceptor or a supervisor and Clinical Coordinator(s) at least 30 minutes before the beginning of an assigned shift if an absence is going to occur.

If the student becomes ill at the clinical site, they will notify the Clinical Preceptor and Clinical Coordinator(s) immediately before leaving the facility. If the student is injured outside the clinical environment, and the injury prevents the attendance of clinical rotations, the student must provide a note or statement of injury from a licensed healthcare provider before the absence(s) will be excused.

If the student is injured at the clinical site, they should notify the Clinical Preceptor and Clinical

Coordinator(s) immediately. If the student needs to be seen by a licensed healthcare provider, the student may check into the emergency room or leave to seek medical care elsewhere. The hospital may not have any responsibility for charges incurred by the student as a result of their injury, so the decision to seek treatment is up to the student. If the injury causes a student to miss clinical time, a note from a licensed healthcare provider is required for excused absence credit. The student may be required to provide a release for return to work by a licensed healthcare provider depending on the circumstances of the injury. The Clinical Coordinator(s) should be informed of all absences.

Medical Leave Policy

Medical leave is described as a period of time when the student is absent due to a medical ailment that has been demonstrated or documented by a licensed healthcare provider.

Prior to returning from an approved medical leave, the student must provide clearance from a licensed healthcare provider. The clearance must indicate when the student is able to return and the student is expected to return on the date provided.

Depending on the length of time the student is away from the program because of medical leave and the status of the student's progress in the program, it may be necessary for the student to extend their education beyond the normal program timeframe or restart the program to meet all program requirements for graduation. This will be determined on a case-by-case basis by the Department Chair.

Inclement Weather

In severe weather, the student must use their own judgment when deciding whether or not to attend clinical. The student will inform the Clinical Preceptor as soon as possible. If schools in the student's clinical area are cancelled, the absence will be excused.

Academic Instruction During Clinical

Even though a greater portion of the student's time is devoted to clinical education after the fourth semester, academic growth and responsibilities continue to be a very important part of the student's professional technical development and proficiency. These courses may be hybrid and are administered on-campus, two to four times per semester. Attendance is mandatory.

Clinical Hours

The student's clinical education will be scheduled for 32 hours per week. Clinical assignments may not exceed 10 clock hours in any one day. The first clinical semester will be scheduled for dayshift and with an option to do two weeks of weekends and/or evening shift. During the second and third clinical semesters, clinical hours are scheduled for dayshift and two weeks of weekend and/or evening shifts (excluding holidays). If a holiday falls on a weekday, that day will count as the day off, and the student will not get their scheduled day off during that week. Within the 32 hours for clinical, one hour for critique class and one hour for discussion will be

scheduled weekly. Day shift hours can be anytime between 5:00 am to 7:00 pm.

Combined didactic and clinical hours are not to exceed 40 hours per week.

Magnetic Resonance Imaging (MRI) Screening Policy

Before any student is allowed to perform a rotation in MRI, the MSU MRI Screening Form must be completed and reviewed by the MSU MRSO or designated MRI faculty, Clinical Coordinator(s), Clinical Preceptor, and the MRI supervisor. Students must also complete the prescribed MSU MRI safety training. If a student is contraindicated to perform a rotation in the MRI area, the Clinical Coordinator(s) will adjust the student's clinical requirements to ensure the safety of the student.

Mammography Policy

Students enrolled in mammography courses will follow the clinical institution's policy on observation and/or performance of exams.

Venipuncture

Students may perform venipuncture if approved by the clinical site after appropriate training.

Clinical Grievance Policies

Students

It is the policy of the MSU BSRT program to work with students in finding fair and equitable solutions to problems, including any student grievance, appeal, question, misunderstanding, or discrimination. Students are urged to take problems concerning clinical education to their Clinical Preceptor.

- 1. The student should first take the problem or question to their Clinical Preceptor. Usually the Preceptor will have direct knowledge about the subject and is best qualified to resolve the situation.
- 2. If the student and Clinical Preceptor are unable to find a solution or answer within a reasonable amount of time, the student may then bring the matter to the attention of the Clinical Coordinator(s).
- 3. Should a satisfactory and impartial solution not result from Step 2, the student may pursue the matter through the Department Chair.

The student should feel free to discuss the matter fully and will have the option of appointing a person to accompany them during the grievance procedure.

Hospital/University

In the event the hospital requests a student be removed from the facility permanently, three subsequent courses of action may take place:

- 1. If the situation is based on a problem specific to the facility and would not prevent the student from completing the program, the university may assign a student to another facility.
- 2. If the new facility is willing to accept the student with full disclosure, the student will be allowed to complete the program.
- 3. The student will not be allowed a second transfer unless the second facility is no longer functioning or policies at the facility change so students are no longer accepted.

If the situation is based on unacceptable, intolerable, or illegal actions by a student which violate the clinical policies set forth in this handbook or which violate any local, state, or federal laws, the student will be removed from the clinical site and dismissed from the program. Under these circumstances, a student will not be allowed to reenter the program at any time in the future.

CLINICAL SUPERVISORS

Clinical Preceptor

Each clinical facility has one or more Clinical Preceptor(s). In addition to their responsibilities of day-to-day operations in the department, these individuals are responsible for the supervision of the student's clinical education. This includes scheduling students through appropriate departmental work centers and assuring they are assigned to qualified technologists; reviewing performance evaluations and rotation appraisals to determine the level of supervision necessary for each student and when they can work independently in a given situation; performing competency and professional development evaluations on each student per semester; scheduling and conducting weekly image critiques; and being available to assist, advise, and counsel students. Clinical Preceptors enforce supervision and repeat of unsatisfactory image(s) policies. In addition, Clinical Preceptors monitor each student's clinical exam record or log sheet weekly.

Clinical Coordinators

These MSU faculty members share in the responsibility for assisting in the organization, supervision, and coordination of the clinical education courses in each of the affiliated hospitals. This responsibility includes assisting in establishing procedures, guidelines, and manuals for the clinical education component of the curriculum, serving as a liaison between the academic and clinical faculty, and maintaining communications between the affiliates and the University. The Clinical Coordinators are also responsible for assisting the Clinical Preceptors as needed and integrating and relating the curriculum objectives for the classroom and clinical portions of the program to make the educational experiences as relevant and as well coordinated as possible.

The Clinical Coordinators also participate in the clinical education experience by observing students at the affiliate sites and by being available to advise and counsel students. Additionally, the Clinical Coordinators visually evaluate diagnostic images submitted for completed competencies for final approval. Supervision policies are enforced and monitored through the periodic clinical site visits by the Clinical Coordinators.

SUPERVISION OF STUDENTS POLICY

The activities of a student must be monitored by a qualified radiologic technologist. Until a student demonstrates competence in a given diagnostic procedure, all of the student's clinical assignments must be directly supervised. The following definitions will be utilized in the supervision policy.

Direct Supervision Policy*

All clinical assignments must be carried out under the direct supervision of a qualified radiologic technologist until the student demonstrates competence in a given procedure.

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

- reviews the procedure in relation to the student's achievement,
- evaluates the condition of the patient in relation to the student's knowledge,
- is physically present during the conduct of the procedure, and
- reviews and approves the procedure and/or image.

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

Indirect Supervision Policy*

Once a student successfully completes an exam for competency, they may perform the procedure with indirect supervision. The JRCERT defines indirect supervision as student supervision provided by a qualified radiographer who is immediately available to assist students regardless of the level of student achievement.

"Immediately Available" is interpreted as the presence of a qualified radiologic technologist adjacent to the room or location where a diagnostic imaging procedure is being performed. **Exception:**

No fluoroscopic or mobile procedures may be performed by a student without DIRECT supervision of a qualified technologist.

Repeating Unsatisfactory Images Policy*

In the event a repeat of unsatisfactory image(s) of an examination being performed by a student

^{*}https://www.jrcert.org/wp-content/uploads/Documents/Resources/Standards-PDFs/2021-Radiography-Standards.pdf

is required, the non-diagnostic image must be critiqued by a qualified radiologic technologist. According to the JRCERT, repeat images must be completed under direct supervision. The presence of a qualified radiographer during the repeat of an unsatisfactory image assures patient safety and proper educational practices. The qualified radiologic technologist must sign their initials in the student's logbook documenting the technologist was present for repeat imaging.

*The supervision and repeat unsatisfactory images policies are also enforced and monitored through the periodic clinical site visits by the Clinical Coordinator(s). While the clinical sites are provided a copy of this handbook, personal visits completed by the Clinical Coordinator(s), ensure standardization. In addition, Clinical Preceptors monitor each student's electronic clinical exam record or log weekly through Trajecsys.

REQUIRED CLINICAL EDUCATION DOCUMENTATION

The following explanations tell how different forms will be used to evaluate the student's progress in the hospital environment. The student will be issued forms as needed by their Clinical Preceptor.

Forms to be completed by the student

Orientation Checklist

This checklist must be complete by the fourth week of the first clinical semester. The student will turn the orientation checklist into their Clinical Preceptor, who will submit the form to the MSU Clinical Coordinator(s) at the end of the semester.

Rationale: This form allows the student, clinical personnel, and MSU BSRT program assurance the student is introduced to all different facets of the hospital and the radiology department.

Checklists for Room Familiarization

The student is expected to complete the Checklist for Room Familiarization located at the back of the Clinical Handbook for each exposure room the first time the student rotates through the exposure room. The student will turn checklists into their Clinical Preceptor who will submit the form to the MSU Clinical Coordinator(s) at the end of the summer term.

Rationale: This form allows the student to become familiar with equipment found in each diagnostic imaging room. If the equipment specifications are not readily available, the student should ask a qualified radiologic technologist or Clinical Preceptor for the specifications. The student may research the item in the operator's manual provided by the equipment manufacturer. The student should not hesitate to discuss this list with the qualified radiologic technologist or Clinical Preceptor.

Clinical Examination Record (Log)

It is the student's responsibility to maintain a daily log of all examinations the student observes, assists with, and performs in Trajecsys (an online program). *Student logs will be randomly reviewed through the Trajecsys system by the Clinical Coordinator(s)*. Repeat images and/or examinations are to be documented in the logbook and the qualified radiologic technologist present for the repeat diagnostic image and/or examination must initial the logbook. This log must remain intact and will be turned in periodically to the Clinical Preceptor and the Clinical Coordinator(s) for evaluation.

List of Competency Examinations

This form identifies all of the examinations in which the student will be required to

successfully achieve competency and identifies most of the examinations the student will encounter during their clinical education period. Before students can perform any examination by themselves, they must demonstrate to a qualified radiologic technologist or Clinical Preceptor that they can perform the examination satisfactorily. A minimum number of competencies are required for each clinical semester and are listed in course syllabi.

The List of Competency Examinations will be issued to the student when they enter the clinical education phase of training. It is the student's responsibility to keep the List of Competency Examinations up-to-date and to have the form readily available when the student is in the clinical site.

Image Repeat Analysis

In order to properly assess the technical progress of the student, an analysis of the number of repeated diagnostic images and reasons for repeats should be completed at least once per semester by the student under the supervision of the Clinical Preceptor. A report of repeat percentages should be forwarded to the MSU Clinical Coordinator(s) by the end of each semester.

Clinical Evaluation by the Student

An evaluation of the clinical experience by the student is to be completed at times deemed by the Clinical Coordinator(s). This information includes identification of the site's strengths and weaknesses. Results from these evaluations will be used to help the clinical sites identify problem areas and seek improvements. These forms are anonymous and will promote better communication between university faculty and clinical site personnel, which in turn will help raise the level of student evaluation of the clinical experience. These evaluations include: Evaluation of Clinical Preceptor by the Student and Evaluation of Clinical Site by the Student.

Forms to be completed by the Clinical Preceptor/ Qualified Radiologic Technologist

Professional Development Evaluation

This evaluation is completed by the student's Clinical Preceptor at the end of each semester. It constitutes a portion of the student's clinical grade.

Rationale: The student's conduct in the clinical setting is judged by the general public to determine a department's professional level. Appropriate conduct is a broad category encompassing a number of considerations including comprehension of examinations, quality of work, organization of work, quantity of work, patient rapport, and performance under pressure, interpersonal relationships, initiative, judgment, attendance/punctuality, personal appearance, and professional ethics. The Clinical Preceptor will solicit

comments from other radiology personnel concerning the student's overall performance.

Competency Evaluations

When the student feels proficient in an examination, the student will ask the Clinical Preceptor or qualified radiologic technologist to complete a Competency Evaluation. The Clinical Preceptor or qualified radiologic technologist will complete the evaluation with no interruption unless a compromise of patient and/or equipment welfare is questionable. Competency Evaluations are Pass/Fail only and count as a part of the student's clinical grade.

Upon completion of each competency, the student will show competency diagnostic images for evaluation by the Clinical Coordinator(s). The Clinical Coordinator(s) have the final word in the acceptance or denial of clinical competencies by signing Clinical Competency Evaluation Form and checking Approved or Denied on the form. These will also be documented and tracked in the Trajecsys system by the Clinical Coordinator(s).

Simulations are approved and arranged by the Clinical Coordinator(s) in the final clinical semester. Students should make every effort to obtain all examinations on live patients. Failure to complete all competencies by the end of the third clinical semester will result in an Incomplete being assigned as the grade, and the student will have thirty (30) days from the first day of the next long semester to complete the competencies and final grade will be reduced by a letter grade.

Definition of Terms

American Registry of Radiologic Technologists (ARRT): The purposes of the Registry include encouraging the study and elevating the standards of radiologic science, as well as the examining and certifying of eligible candidates and periodic publication of a listing of registrants.

Clinical Coordinator: The MSU faculty members who are directly responsible for communications between the clinical facility and MSU.

Clinical Preceptor: The qualified radiologic technologist designated at each clinical facility to be responsible for the supervision of the clinical education of students assigned to that facility.

Competency: The student has performed the procedure independently, consistently, and effectively during the course of his or her formal education.

Department Chair: The current Chair of the MSU Radiologic Sciences Program.

Direct supervision: Supervision of the student by a qualified radiologic technologist who personally reviews the request for examination in relation to the student's achievements; evaluates the condition of the patient in relation to the student's achievements; is physically present in the room during the performance of the examination; and reviews and approves the images taken.

Indirect supervision: Supervision provided by a qualified radiologic technologist who is immediately available to assist the student regardless of the level of student achievement.

Immediately available: The presence of qualified radiologic technologist adjacent to the room or location where a diagnostic imaging procedure is being performed. This availability applies to all areas where ionizing radiation equipment is in use including beside and surgical procedures.

Medical Radiologic Technologist: A radiologic technologist who is licensed through the Texas Medical Board as a medical radiologic technologist. All working radiologic technologists within the state of Texas must be certified as a medical radiologic technologist.

Program Director: The MSU faculty member who assures effective program operations, oversees ongoing program accreditation and assessment processes, and assumes the leadership role in the continued development of the program (most often the department chair).

Qualified Radiologic Technologist: Technologists who are certified through the American Registry of Radiologic Technologists (ARRT) and if the clinical site is in the state of Texas, the Medical Radiological Technologist (MRT).

Radiology department: The department or area of the hospital or clinical facility which performs imaging procedures, using various techniques of visualization, with the diagnosis and treatment of disease using any of the various sources of radiant energy.

Supervisor: The person who supervises radiologic technologists, clerical staff, and other support personnel of the radiology department and/or other imaging areas of the radiology department.

Unsatisfactory image: An image of undiagnostic quality as determined by the qualified radiologic technologist, Clinical Preceptor, or Clinical Coordinator(s) because of patient positioning, exposure factors, motion, artifacts, etc. Unsatisfactory images performed by a student must be repeated with direct supervision by the qualified radiologic technologist.

CLINICAL AFFILIATION DISTANCE FROM MSUTEXAS

Clinical Affiliates

Baylor Scott & White of Frisco, Frisco, TX **

Baylor Scott & White of Marble Falls, Marble Falls, TX**
Baylor Scott & White of McKinney, McKinney, TX **

Baylor Scott & White of Plano, Plano, TX **

Carrollton Regional Medical Center, Carrollton, TX **

Chickasaw Nation Medical Center, Ada, OK**

Clay County Hospital, Henrietta, TX

Electra Hospital, Electra, TX

Ennis Regional Medical Center, Denton, TX **

Graham Regional Medical Center, Graham, TX**

Good Shepherd CHRISTUS, Longview, TX **

Hunstville Memorial Hospital, Huntsville, TX **

Kell West Regional Hospital, Wichita Falls, TX

Medical City of Dallas, Dallas, TX**

Medical City of Denton, Denton, TX**

Medical City of Lewisville, Lewisville, TX**

Mercy Hospital Ada, Ada, OK**

Mercy Hospital Ardmore, Ardmore, OK**

Methodist Charlton Medical Center, Dallas, TX**

Methodist Dallas Medical Center, Dallas, TX**

Shannon Medical Center, San Angelo, TX**

Southwestern Medical Center, Lawton, OK**

Texas Health Presbyterian, Flower Mound, TX**

Texoma Medical Center, Denison, TX**

United Regional Health Care System, Wichita Falls, TX

Wilbarger General Hospital, Vernon, TX**

Wise Regional Health System, Decatur, TX**

Distance from MSU

133 miles - 2 hrs 8 mins

256 miles – 4 hrs 17 mins

129 miles – 2 hrs 28 mins

132 miles - 2 hrs 5 mins

126 miles - 2 hrs

148 miles - 2 hrs 30 mins

20 miles - 21 mins

32 miles – 32 mins

170 miles - 2 hrs 35 mins

61 miles - 1 hr

270 miles - 4 hrs 8 mins

308 miles - 4 hrs 38 mins

5 miles - 7 mins

138 miles - 2 hrs 15 mins

106 miles – 1 hr 45 mins

118 miles – 1 hr 47 mins

110 IIIIcs – 1 III 47 IIIIIs

149 miles - 2 hrs 39 mins

 $90\ miles-1\ hr\ 37\ mins$

148 miles - 2 hrs 16 mins

142 miles - 2 hrs 15 mins

234 miles - 3 hrs 30 mins

59 miles - 1 hr

118 miles - 1 hr 59 mins

119 miles – 1 hr 55 mins

2.7 miles – 7 mins 56 miles – 1 hr

77 miles -1 hr

Additional Clinical Sites*

Clinics of North Texas - Midwestern Site, Wichita Falls, TX Faith Community Rural Health Clinic, Bowie, TX

OSTC, Wichita Falls, TX

Texas Scottish Rite Hospital for Children, Dallas, TX**

Texas Oncology, Wichita Falls, TX

 $\begin{array}{c} 2.6 \text{ miles} - 7 \text{ mins} \\ 49.5 \text{ miles} - 48 \text{ mins} \end{array}$

6 miles – 8 mins

140 miles - 2 hrs

4.7 miles - 7 mins

^{*}Students may be assigned to these additional clinical sites to meet clinical competencies.

^{**} These clinical sites are more than or approximately 1hour travel from the main campus of Midwestern State University.

POLICY ON CHANGES TO THIS HANDBOOK

The information in this handbook is current at the time it is posted. However, this manual may be revised or amended upon written notification to the student. No revision or amendment will be retroactive but will become effective upon the date of student notification. The Chair of Radiologic Sciences will make final interpretation of program policies and procedures.