Missouri Southern State University
Department of Radiologic Technology

Policy and Procedure Manual
Student Handbook Reference

Reviewed and Approved - May 2015
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Radiologic Technology Mission Statement

Consistent with the philosophy of MSSU, the mission of the radiologic technology program is to provide high quality entry-level radiographers for the service area of the University. Attention is focused on the need of each student for local and international service. This is proven by our strong outcomes effectiveness measures below, which can also be access by visit https://portal.jrcertaccreditation.org/summary/programannualreportlist.aspx which independently accredits the program. JRCERT posts five-year average credentialing examination pass rate, five-year average job placement rate, and annual program completion rate for the program.

<table>
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<tr>
<th>Outcome</th>
<th>Measurement Tool</th>
<th>Benchmark</th>
<th>TimeFrame/ Responsible Party</th>
<th>Results</th>
<th>Analysis/Action Plan</th>
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<tbody>
<tr>
<td>1) Students will be able to pass the national ARRT certification exam</td>
<td>ARRT documentation sheet</td>
<td>As a class, 75% average first-time pass rate over a 5 yr. period</td>
<td>Annually in March Director</td>
<td>March 2015 for class of 2014 - 100%</td>
<td>Passage rates (100% for 14 straight years) &amp; scaled scores on exam have remained well above national averages. This indicates students who are well prepared.</td>
</tr>
<tr>
<td>2) Employers will indicate satisfaction with students hired from the program</td>
<td>Post-Graduation Employer Survey, 6 months after graduation</td>
<td>Average score of 7 out of 10 over a 5 year period</td>
<td>Annually in March Director</td>
<td>2009 9.03 2010 – 9.07 2011 – (n=4)9.18 2012 – (n=8) – 9.375 2013 (n=8)-8.81 <strong>Overall avg. – 9.09</strong></td>
<td>Benchmark met. Employers indicate a high level of satisfaction in all areas of radiology with our students. The lowest area was use of manual techniques. Effort will be made to address this with clinical areas to explore ways to improve this next year.</td>
</tr>
<tr>
<td>3) Students will be able to find employment in the radiologic sciences field</td>
<td>Phone Survey of students/ employer survey</td>
<td>5 year average job placement rate of not less than 75% within 6 months after graduation</td>
<td>Annually in March Director</td>
<td>2010 – 88% 2011 – (n=9)100% 2012 – (n=8) 100% 2013 – (n=8) 100% 2014 – (n=7) 100% Overall 5 yr. avg. 98%</td>
<td></td>
</tr>
</tbody>
</table>
4) Graduates will indicate they were satisfied the program prepared them as entry-level practitioners

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Measurement Tool</th>
<th>Benchmark</th>
<th>TimeFrame/Responsible Party</th>
<th>Results</th>
<th>Analysis/Action Plan</th>
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</table>
| 5) Students will complete the program | Count of number of students starting program compared with number graduating | 75% annual completion rate | Annually in July Director | 2010 – 78%  
2011 – 100%  
2012 – 89%  
2013 – 89%  
2014 – 78%  
5 yr avg. = 87%, | Benchmark met, however this metric is declining and changes to the curriculum and recruitment efforts were made in 2014 to attempt to improve it. Continue to monitor to see impact of changes. |

Goal 1: Students will develop communication skills enabling them to communicate with patients and healthcare providers.
<table>
<thead>
<tr>
<th>Outcome Measured</th>
<th>Measurement Tool</th>
<th>Benchmark</th>
<th>TimeFrame/Responsible Party</th>
<th>Results</th>
<th>Analysis/Action Plan</th>
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<tr>
<td>(1) Students will be able to effectively explain examination procedures to patients and/or family members.</td>
<td>&quot;Criteria for Success&quot; grading checklist, Questions 1-8</td>
<td>Annually as a class in Introduction to Radiology, meet 70% of the &quot;Criteria for Success&quot; listed during a lab check-off exercise where students are given an exam and are required to obtain a history, explain the procedure and give any special instructions to the patient.</td>
<td>Annually in the Fall semester Instructor of Class</td>
<td>2014–(n-10) 90%</td>
<td>Benchmark met. Continue to monitor.</td>
</tr>
<tr>
<td>(2) Students will be able to effectively communicate as demonstrated by an oral presentation on an advanced modality field in radiology.</td>
<td>Grading rubric</td>
<td>Annually, as a class average, meet 80% of the criteria covered in the rubric during a speech on and advanced modality, using the bottom of the rubric section only.</td>
<td>Annually during the Spring semester “Special Topics” class Instructor</td>
<td>Spring 2015–(n-6) 93% 167/180</td>
<td>Benchmark met. The benchmark for this measure will be raised to 85% for next year.</td>
</tr>
<tr>
<td>(3) Students will be able to verbalize problems and solutions to rejected images.</td>
<td>Image critique grading rubric (questions 3-4)</td>
<td>As an annual class average, students will identify 85% of the problems and solutions to rejected images</td>
<td>Annually during summer semester “Image Critique” Instructor</td>
<td>Benchmark changed for the plan in 2013 to 85%, Result July 2014 n=7,89%</td>
<td>Benchmark met</td>
</tr>
</tbody>
</table>

Goal 2 Students will be able to think critically and solve problems in their daily work environment.
(1) The student will be able to successfully use critical thinking and problem-solving skills in the clinical environment upon graduation from the program.

| Clinical instructor post-graduation survey | Average annual class rating of 6 of 10 annually on the clinical instructor post-graduation survey question “Ability to problem-solve and think critically in demanding situations” | Annually in July Clinical Coordinator | August 2013 n = 11 8.8. 6 surveys excluded based on remark that tech. had not worked with them enough | Result above benchmark, but CI’s feel trauma check-off’s need improved, so improvement plan was implemented in 2014. Continue to monitor for improvement. |

(2) Students will be able to verbalize problems and solutions to rejected images.

| Image critique grading rubric (questions 3-4) | As a class average, students will identify 85% of the problems and solutions to rejected images | Annually during the summer semester Image Critique Class Instructor of class | Benchmark changed in 2013 to 85%, Result, July 2014 n =7, 89% | Benchmark met. Continue to monitor. Benchmark was changed from 80% to 85% for this year. |

<table>
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<th>Goal 3 Students will demonstrate professionalism</th>
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<tr>
<td><strong>Outcome</strong></td>
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<td>(1) Students will demonstrate professionalism as demonstrated by their clinical attendance record</td>
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</table>
2) Students will demonstrate core principles of professionalism as demonstrated by survey answers from physicians and staff technologists at the clinical sites.

**Professionalism Survey**

As a class, an average of 4 out of a possible 5 as measured on an annual survey distributed to the clinical sites.

**Annually in March/Clinical Coordinator**

Class avg. 4.1 out of 5 possible (n=12)

June 2013

Benchmark, continue to monitor, try for better return of surveys next year

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Goal 4 Students will demonstrate competence in their clinical practice

1) Students will demonstrate clinical competence in their positioning skills.

**Positioning I grading rubric**

As a class average, students will achieve a minimum score of 40 out of 50 points (80%) on the Final Competency Lab Test.

**Annually in December, Instructor for Positioning 1**

Dec 2013 (n=9) avg. 91%

Students exceeded benchmark, continue to monitor, consider increasing benchmark to 85% for next year

2) Graduates will be clinically able to perform as indicated by the clinical instructors.

**Post-Graduation Clinical Instructor Survey**

Average annual class rating of 7 out of 10 overall score for the survey.

**Annually in July, Director**

August 2014 avg. 8.5

Above benchmark, continue to monitor

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**Program Philosophy**

In order to accomplish the program goals, it is the philosophy of MSSU to provide students with a high quality educational experience that includes:

1. Didactic classes providing them access to information to successfully pass the national registry.
2. Clinical rotations with exposure to a sufficient number and variety of clinical exams to develop the skills necessary to be successful entry-level radiographers.
3. Clinical and classroom situations allowing students to develop problem-solving and communication skills.
4. Opportunity for professional growth and development.

**Organizational Chart**

Dean, School of Technology

Qualifications: The Missouri Southern State University President, under the direction of the Board of Regents duly appoints this person.

Responsibilities: The Dean supervises the Radiology Program Director (Department Head). As such, the dean has final say in all matters related to the procurement of financial, human and capital resources.
and administrative decisions for the radiologic technology program. In addition, the Dean serves as part of the Administrative Committee that makes decisions related to clinical site(s).

Program Director - Department Head

Qualifications: The Program Director must be registered by the ARRT and possess a masters degree with three years of radiologic technology experience. A minimum of two of these years must have been spent as an instructor in a JRCERT accredited program.

Responsibilities: The Program Director organizes, administers, reviews, develops and assures program effectiveness. This includes budget planning, evaluating and assuring clinical education effectiveness, teaching in the classroom, maintaining current knowledge of the discipline and a continued role in development of the program. This individual will oversee the Secretary of the department and Clinical Coordinator, assigning tasks as outlined in their job responsibilities.

Clinical Coordinator:
Qualifications:

This position requires a Bachelors Degree and must be registered by the ARRT and possess three years of full-time experience as an R.T.(R) with two years of experience in a JRCERT-approved program.

Responsibilities:

Instructs, advises and evaluates students regarding clinical performance and provides corrective feedback. In addition, coordinates clinical schedules and communication between the program and JRCERT with clinical facilities. Coordinates clinical orientation at clinical sites. Teaches or assists with didactic classes and assists the Director with Administrative requirements of the program as needed. Remains current on JRCERT, clinical and program policies and procedures, assuring student compliance.

Didactic Faculty:

Qualifications: Didactic staff shall hold appropriate professional credentials, be qualified to teach the assigned subject and be proficient in curriculum development, instruction, evaluation and academic counseling.

Responsibilities: Didactic faculty will teach, evaluate and report student progress in given classes as needed by the program director.

Clinical Instructors:
Qualifications: Clinical instructors shall be proficient in supervision, clinical instruction and evaluation. In addition, they shall hold an ARRT certification or equivalent and have two years of full-time experience in radiologic technology.

Responsibilities: Clinical instructors should have knowledge of program goals, understand clinical objectives and provide students with instruction within the guidelines of the program policies.

Clinical Staff: Clinical staff are not paid by the University, but at minimum must understand the clinical competency system, understand requirements for student supervision and support the educational process. They should maintain current knowledge of program policies, procedures, and student progress.

Department Secretary:

Qualifications: Secretarial staff should be proficient in the use of computers, including Word, Excel and PowerPoint. They should possess strong interpersonal skills and be able to assist students and the Director as needed.

Responsibilities:
Answer the phone, type reports, minutes and send out letters as needed, and administer the HOBET
Coordinate the Directors schedule with the needs of current and prospective students
Assist with setting up orientation and obtaining needed documentation from students

Student Selection and Drug/Background Screening Process
The MSSU Radiology Program does not discriminate based on race, color, religion, gender, age, disability, national, origin or any other protected class.

Students wishing to apply for the program must meet all admission requirements set by the University as set by the Board of Governors and Coordinating Board of Higher Education. These may be found in the University Catalog under “Admissions.” Because of the limited number of students selected into the program, additional requirements must be met by applicants wishing to enter the Radiology program.

A student wishing to apply for admission to the program should meet with the program director or his/her designee. The student will be given an overview of the program and field, as well as the suggested order of study and an application for program admission (or these may be obtained on-line through the college radiology web site at mssu.edu). Students wishing to enter the program must return all application materials on or before January 31st of the year they wish to attend. Prospective students must job shadow prior to submitting their application. All pre-requisites for the program (as outlined in the MSSU catalog) must be completed prior to the start of the Fall academic year in which the student wishes to start. In addition, the following criteria are used in the selection process:
1. High school transcript - The applicant must have graduated from high school with an overall G.P.A. of 2.25 or better or have completed the G.E.D.
2. College transcript - The applicant must have passed each prerequisite course with a “C” or better. This also applies to any other courses required for the A.S. in Radiologic Technology that were taken prior to admission. Students may be admitted into the program with the condition they successfully complete all prerequisite courses during the summer preceding the enrollment date, including Anatomy and Physiology II. They must have an overall 2.5 GPA minimum. Students with the best grades in the prerequisite science and math courses will be given preference for admission to the program.

3. ACT/HOBET Test scores – Applicants with above average percentile ranks will be given preference for entry into the program.

4. Recommendation letters - These should indicate the student is motivated (goal-directed), has effective interpersonal skills and has demonstrated effective study habits and/or work habits. The form used for references may be printed off at the college radiology web site at mssu.edu/

5. Personal interviews - The applicant should exhibit poise, good communication and interpersonal skills and the ability to use critical thinking skills in their responses to questions. They should have formulated a realistic plan necessary to achieve success while enrolled in the program.

6. Students selected into the program must submit to a criminal background check prior to starting the program. The Program Director will provide paperwork and instructions to students chosen into the program. It is the student’s responsibility to make sure the background check is completed and paperwork submitted to the Program Director in a timely manner. It is also the student’s responsibility to pay fees associated with the background check. Students involved in felony convictions that might pose a potential threat to patients, faculty or employees at the clinical site will not be allowed into the program. This determination may be made by the Program Director, clinical site management or Dean of Health Sciences. Students failing to submit their criminal background check prior to starting the program will not be allowed into the program.

7. Students who have been selected to enter the program must also complete all items noted on the orientation check-off list by the due date noted on the form. This includes obtaining the necessary vaccinations and shot records requested by the program. These include documentation of Hepatitis A and B, MMR, T-DAP, varicella and TB test. It is recommended that students obtain the flu vaccine each Fall semester as this may impact their ability to attend clinical rotations. Students are responsible for the costs associated with obtaining these vaccinations and tests. They may obtain them at their family physicians office or county health department or through the MSSU Health Center. The costs of the vaccines are at MSSU are listed in the table below, but are subject to change.

**Price List**

<table>
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<th>Vaccination</th>
<th>Cost</th>
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<tr>
<td>Tb Skin test (PPD)</td>
<td>$ 5.00</td>
</tr>
<tr>
<td>Hepatitis B series</td>
<td>$135.00 ($45.00 each)</td>
</tr>
<tr>
<td>Hepatitis A &amp; B* series (3 shots)</td>
<td>$165.00 ($55.00 each)</td>
</tr>
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</table>
Titer for Rubella or Hepatitis B $ 12.00
Blood draw fee $ 3.00
Varicella vaccine (2 shots) $220.00 series ($110.00 each)
Titer for Varicella $ 45.00
Influenza vaccine $ 15.00

Rubella vaccines are currently NOT available in the Student Health Center. Contact the city/county Health Department or your preferred health care provider.

*The MSSU Student Health Center has the TwinRx vaccine available. This is a combination vaccine for Hepatitis A and B.

Student Orientation

Students will go through an orientation process prior to starting the program. This will include, but is not limited to orientation on the Program Policies and Procedures, JRCERT Standards as well as general information on Standard Precautions, Hazards in the Workplace, communicable diseases, substance abuse, emergency preparedness and HIPPA related to assigned clinical sites. In addition, students will be given more specific clinical site training in these areas prior to starting clinical rotations.

Nondiscrimination Policy

MSSU complies with all local, state and federal laws and regulations concerning civil and human rights. Educational programs, admissions and employment practices of the college are free of any discrimination based on race, sex, color, religion, national origin, handicap or prior Vietnam or military service.

The policy of the college is not to discriminate on the basis of sex or handicap and is in compliance with Title IX of the 1972 Educational Amendments and Section 504 of the Rehabilitation Act of 1973.

Transfer Students

The American Registry of Radiologic Technologists (ARRT) requires that applicants possess certain qualifications before taking the certification examination. Those qualifications are published in the ARRT Rules and Regulations (ARRT.org).

Other qualifications for potential student transfer include:
1. The student must be transferring from another JRCERT or college accredited by a regional accrediting agency recognized by the Department of Education.
2. The MSSU program must have a vacancy before the student is accepted.
3. All classroom courses and clinical records must be evaluated for transfer by the Program Director and/or Registrar.

4. Reference checks and interviews with the student will also comprise part of the decision-making process. Such students will be held to the same level of scrutiny as other students wishing to enter the program.

Advanced standing entry may be considered for students who have started a previous radiologic technology program in the last two years. In such cases, the student must demonstrate through their college transcript and course syllabi that they have met all pre-requisite courses necessary to enter the program at a given point in time. They must present to the Director an official transcript and syllabi for each course they wish to transfer. The Program Director (Department Chair) will evaluate each course equivalency. Each course must be similar in scope and content in order to transfer. Successfully challenged courses will be recorded as part of the student record. Competency testing will also be required to determine if the student possesses the necessary knowledge and skills to enter the program at such time. Students must simulate five randomly chosen radiologic exams that they should be competent in at the time and score a minimum of 75% on all five to be eligible for selection into the program. The student must have a 3.0 overall GPA to be considered for advanced standing.

Advanced placement may be granted to registered technologists who desire the Associate of Science Degree (see college catalog).

**School Time Table**

The program is twenty-four months in duration and approximates the academic school year followed at MSSU. Students start the program in the summer semester. The official start to the program and academic year starts with the first day of the fall semester and runs through the spring and summer semesters. During this period, time is divided between didactic classes and clinical schedules. Students will not have more than forty hours of contact time (class and clinical time combined) per week. Graduation will take place in the spring semester of the second year.

**Clinical Schedule/Competencies**

Students will be scheduled to work clinical hours. They are expected to adhere to the rotation as laid out by the director and/or Clinical Coordinator. Students may not switch days without approval from the Director or Clinical Coordinator. Clinical rotations may include occasional evening and weekends, but will never exceed 25% of the total clinical time.

Student clinical rotations will not exceed 40 hours per week or more than 10 hours in one day. Since clinical sites are dispersed, students must provide their own transportation to and from clinical sites. Currently, clinical sites are located within the city of Joplin at Freeman and Mercy Joplin and in Galena, KS at Orthopedic Specialists of the Four States. However, there is no guarantee that future sites will not be added and could add to travel time and expenses for students.

Students may also be assigned to clinical observation sites during the program. A clinical observation site is defined as one where the student is allowed to observe certain procedures, but may not participate in patient care or exam procedures.
Students will be given clinical evaluation forms for each scheduled rotation. It is the student’s responsibility to get the technologist in each area to check-off the student on given rotations, review the form and to get it back to the program director. The director will evaluate each rotation as it is completed and set up any needed meetings with students to discuss required improvements. In addition, students will receive clinical objectives for each semester. It is the student’s responsibility to make sure they achieve and document achievement of the objectives for each rotation. Failure to complete the assigned semester objectives will result in dismissal of the student from the program. **Note:** mammography is an optional voluntary rotation for both males and females. Students may choose this as a specialty rotation or voluntarily decline it based solely on their wishes. If so desired, students may use this rotation as a float rotation to another area of interest after consulting with the Director.

In addition to the objectives, students are expected to complete their ARRT competencies while enrolled in order to graduate from the program and be eligible to sit for the national certification examination. They must complete the required number of competencies designated on their syllabus for each semester to remain in the program. Those failing to do so will receive an in-progress (IP) designation for the clinical grade. They will have one additional month (beginning with the first week of the next semester) to complete them or they will be dropped from the program.

In order to be verified as competent in ARRT **trauma protocols** (i.e., shoulder, upper extremity – non-shoulder, lower extremity), the student must do more than a routine exam. Proving competency means that the exam was done in a non-routine manner where the student manipulated the image receptor, tube or patient differently than in a routine exam without help from a supervising technologist in order to obtain the needed images, send the images to PACS and could successfully critique their images and answer questions with 100% proficiency. Such demonstrations may take place in the radiology department, emergency department trauma room or during mobile x-rays. The intent of competencies in trauma situations is to develop a student who can obtain required projections while working around patients who may not be able to fully cooperate. This type of manipulation requires critical thinking skills from the student beyond that required for routine exams.

In order to be checked off as competent on the ARRT **surgical protocols** with a c-arm (orthopedic and non-orthopedic exams), the student has to independently set-up the c-arm, operate the controls, including proving the ability to manipulate the c-arm during the procedure, send images to PACS, remove the c-arm from the room and successfully critique their images while answering questions from the supervising technologist with 100% accuracy.

Students missing clinical days must make up all clinical time by the end of the semester.

Make-up time must be done so as to not conflict with other student rotations and access to examinations. If this is the case, they may have to be scheduled on evenings or weekends. In either case, it is up to the discretion of the Program Director or Clinical Coordinator to schedule the students. **Make up time cannot be done in partial shift hours.** The student must work the entire shift.
Make-up time should be scheduled with the Clinical Coordinator or Director using the appropriate make-up form. Students who fail to make up the time will not graduate from the program.

**Special Fees**
Refer to the MSSU catalog for tuition and related expenses. In addition to tuition and fees, students are responsible for purchasing/renting textbooks, student uniforms, liability insurance, miscellaneous supplies, travel costs to clinical sites, professional membership fees and licensure fees. Students are also assessed special fees related to the criminal background check, simulation lab fee, membership in the Radiology Club, immunizations and the Kettering Review during the second summer of the second year. Students attending the Missouri Society of Radiologic Technology (MSRT) meeting are also responsible for cost of attending the conference each year. Additional fees may be added during the two-year program cycle.

Special Fees:
- Liability Insurance - $17.50 (due in the Fall semester each year)
- Criminal Background Check/Drug Screen - $90
- Immunizations – See price list (page 8)
- Kettering Review - $250 (2nd year only)
- Simulation Lab Fee - $100 (2nd year only)
- Radiology Club Membership Fee - $5 (each year)

Additional fees may be added at any time during the two-year program cycle.

**Books**

Students in the program will be responsible for the rental or purchase of college textbooks. These will be ordered through the college bookstore.

**Insurance**

All students are required to have liability insurance. This will be paid for through the college group insurance plan and will be added on as a special course fee during the fall semester of each year. Currently, the fee is $17.50 per year, but is subject to change without prior notice.

It is recommended that each student have their own personal health and accident insurance. MSSU has student health services. See the university catalog for more information.

**Library Facilities**

Radiologic Technology books and resources are available through the MSSU Library. On-line search capabilities and interlibrary loans of books are valuable services offered to students doing research papers.

**Financial Aid**
Missouri Southern State University’s Financial Aid Office has packets, procedures and instructions needed to assist students needing financial aid. All financial aid must be processed by the first day of class in order to defer tuition and fees and to avoid being dropped from classes. The usual time to develop and finalize a financial aid package varies from six to ten weeks. For additional resources on types of financial aid and assistance with filing paperwork, contact the financial aid office at 625-9325 in Hearnes Hall.

Student Supervision

Until students achieve competency in given exams (as required by the program), all clinical assignments shall be carried out under the direct supervision of a qualified radiographer. Competency means the student can perform the exam independently and safely and have been signed off as competent on their ARRT Competency Form by an R.T. or program faculty. Direct supervision denotes that a registered radiographer oversee the examination and be physically present in the room. The supervising R.T. must review the request in relation to the student’s achievements, evaluate the condition of the patient and review and approve the radiograph.

All students deemed competent in given exams, must still receive indirect supervision from a registered radiographer. Indirect supervision is defined as supervision provided by an R.T. who is immediately available in the area to assist a student. Students who have been deemed competent on given exams must continue to do such exams to become proficient, meaning they can perform the exams on different patient body habitus, disease conditions and clinical situations.

Unsatisfactory radiographs (repeat radiographs) shall be repeated only in the presence of a qualified radiographer (direct supervision) who will confer with the student and counsel them as needed to correct mistakes. Students repeating images must fill out the “image repeat” form and indicate the reason for the repeat and attest to which R.T. provided direct supervision during the repeat. Students repeating images without direct supervision are subject to the progressive disciplinary process. Any student found guilty of false documentation on the “image repeat” form will be subject to disciplinary action for falsifying records. This form must be turned with their clinical evaluation forms for each rotation.

Students who feel they are not receiving appropriate supervision as stated above should report such incidents to the Program Director for correction. Students are responsible for following the above rules and will be subject to disciplinary action for failure to do so. Program faculty will closely monitor student supervision through education of clinical site personnel and observation. Periodic surveys may be done and students will be asked on the Clinical Instructor evaluation done twice per year if technologists are providing proper supervision as required by JRCERT.

In addition, according to JRCERT, there should not be more than one student per x-ray room or radiographer, whichever is less. If this should become an issue at the clinical site, the student should report the incident to the Program Director. Students in violation of this policy will be subject to
the progressive disciplinary process. This process is supervised and monitored by program official observation and oversight of the Clinical Instructors.

Pregnancy

Purpose: To establish a protocol by which pregnant students who train in the vicinity of ionizing radiation are educated as to the proper safety precautions and options in the program.

Policy: Students who are current members of the program or are selected to begin the program may voluntarily disclose a pregnancy to program officials. They may also choose not to disclose such information. They have the option to take a written leave of absence or to continue the program with or without modifications to their training. Students may also withdraw their declaration of pregnancy (this must be done in written form with a student signature).

If the student chooses to take a voluntary written leave of absence, they must document in writing, the dates they will leave and return. Failure to comply with the dates will be cause for dismissal from the program. See the Program Director for further information.

The student may also voluntarily withdraw from the program if they are pregnant. Again, this must be done in writing to the Program Director and stipulate the date of withdrawal from the program.

Procedure: MSSU School of Radiologic Technology has adopted the conservative recommendation of restricting the dose of ionizing radiation to the fetus during the entire period of gestation to no more than 500 mrem.

1. If you train in an area where the anticipated dose is less than 500 mrem to the fetus over the gestational period, you are able to continue to train in this area with or without modifications. You may request information or possible modifications from the Director. In addition, the radiation safety officer may make certain recommendations regarding your training assignments to further reduce the dose to the fetus. One other alternative is to take a leave of absence (see leave of absence policy in this manual).

2. Based on past experience, no clinical areas have been identified which would be considered likely to result in a dose to the fetus exceeding 500 mrem if the established radiation safety procedures are practiced. If a situation is identified in which the anticipated dose to the fetus over the gestation period would be more than 500 mrem, the following guidelines are suggested (although, the student would make the final decision):
   A. You may continue to train in the area with certain modifications to limit exposure of the fetus to less than 500 mrem (based on recommendations of the RSO). The training environment may require slight modifications to ensure that the dose to the fetus does not exceed 500 mrem.
   B. You may, at your option and with full awareness of a slight increased risk for the unborn child, decide to continue training in this area without modification. It is possible, under these circumstances, that the fetus could receive a dose of more than 500 mrem. If you choose
this option, you must sign a statement acknowledging your willingness to train in the area where the dose to the fetus might exceed 500 mrem. You are not encouraged to select this option.

3. If you are unwilling to accept the increased risk to your unborn child due to your current level of radiation exposure, you may be placed on a leave of absence in accordance with the MSSU School of Radiologic Technology policy.

4. Individuals who are pregnant are not prohibited from training in or frequenting radiation areas. These individuals may also operate sources of ionizing radiation.

5. During your pregnancy, you are encouraged to monitor your radiation exposure via the dosimeter readings which are made available to students. Contact the radiation safety officer if any unusual readings occur.

WHAT THE RADIATION EXPERTS SAY ABOUT EXPOSURE TO IONIZING RADIATION

1. Natural background radiation levels are such that the average person in the United States receives approximately 125 mrem each year.

2. The actual dose received by the embryo/fetus is less than the dose received by the mother, because some of the radiation is absorbed by the overlying maternal tissues.

3. The unborn child is most sensitive to ionizing radiation during the first three months of gestation.

4. The normal incidence of congenital abnormalities is 4-6%. It is impossible to attribute a given anomaly to a small dose of radiation received by an embryo/fetus. The estimated risk to the unborn baby is small, .025% for 500 mrem.

5. Some studies suggest a relationship between prenatal exposure and childhood leukemia. The risk is small: 1 in 8,800 for 500 mrem. The induction of other childhood cancers is considered to be a similar level of risk.

6. The radiation dose required to produce sterility is 200,000 mrem or more. Occupational dose levels will not interfere with your ability to bear children.

IF YOU HAVE QUESTION OR WANT ADDITIONAL INFORMATION

1. The Nuclear Regulatory Guide 8.13 (“Instruction concerning Prenatal Radiation Exposure”) will be made available to you for informational purposes if you request it from the Program Director.

2. If you would like to visit with the Radiation Safety Officer, please contact the Program Director and ask him/her to set you an appointment. You will be asked to acknowledge in writing that the Radiation Safety Officer gave you instruction.

SENSITIVITY TO THE FETUS TO IONIZING RADIATION

A number of studies have suggested that the embryo/fetus may be more sensitive to ionizing radiation than an adult, especially during the first three months of gestation. The National Council on Radiation Protection and Measurements (NCRP) has recommended that special precautions be taken to limit exposure when an occupationally exposed woman could be pregnant. Specifically, the NCRP has recommended the maximum permissible dose to the fetus from occupational exposure of the expectant
mother should not exceed 500mrem. This is approximately 1/10th the maximum permissible occupational dose limit.

WHAT TO DO IF YOU BECOME PREGNANT AND ARE EXPOSED TO IONIZING RADIATION

When you learn you are pregnant, you have the option of informing or not informing the Director of the program, remaining in the program (with or without modifications) and/or taking a written leave of absence. You may also submit a written notice of revocation if you have declared a pregnancy status. The student should realize that if they choose not to inform the Director, a dosimeter will not be ordered to monitor the fetus, which could pose an extra threat to the unborn fetus.

If you notify the Director of your pregnancy, an additional dosimeter will be ordered. Always wear the second dosimeter on your abdomen and under the lead apron. It will provide a more accurate record of the radiation your fetus actually receives.

I have read, understand and acknowledge the above.

_________________________________
Student

_________________________________
Program Director

Radiation Policy

All students must wear a dosimeter when in the radiology department or any part of the clinical area. It should be worn on the collar of your shirt to monitor exposure to the lens of the eye and thyroid. When the apron is worn, the dosimeter should be worn on the outside of the apron at the neck level. If pregnant, an additional fetal monitor must be worn at the waist level under the apron.

Dosimeters should not leave the clinical area. Students should consult with the Clinical Coordinator or Program Director to find the location of where dosimeters are kept at each clinical site. Students must change their dosimeters in a timely manner, each month in order to receive timely feedback on their exposure levels to radiation.

Leaded protective equipment must be used any time the student could be exposed to radiation (remember, aprons do not protect from primary radiation). Students must wear leaded aprons and thyroid shields when operating or assisting with mobile radiography.
Students shall not hold image receptors during radiographic exposures. Such incidents are subject to disciplinary action. Students should not restrain patients during exposures when other restraint methods are available. If no other method of restraint exists, (as determined by their supervising R.T.), the student should stand to the side of the beam. Never stand in the primary beam. Leaded gloves should also be worn any time hands are near the primary beam. The parent (male preferred) should be the primary person assisting and holding patients (not students). Students concerned that they are being asked to restrain patients too often should report such incidents to Program Faculty.

Students should take advantage of the Cardinal Rules of Radiation Protection. These state you should minimize the amount of time spent in ionizing radiation. This can be controlled by minimizing the exposure time during fluoroscopy. Secondly, always maintain as much distance between you and the source (x-ray tube) as possible. Thirdly, use leaded protective shielding. Always wear leaded aprons and thyroid shields while doing portable exams and during fluoroscopy or c-arm procedures. Stand behind the lead-protected control booth during other exposures. Time, distance and shielding are your best protective measures to minimizing radiation.

Copies of the dosimetry reports will be available to the students to review and initial each month. It is your responsibility to read and initial each report. If you have any questions, contact the Program Director. In particular, students receiving 50 mr or more in a month will be counseled by the Program Director to discuss methods to decrease such exposure levels. Students that receive a Level 1 ALARA report from the Radiation Safety Officer must read the letter, sign it and return the letter to the Program Director. The Director will counsel the student on radiation safety.

It is the student’s ethical duty to practice the ALARA (as low as reasonably achievable) concept when operating ionizing radiation equipment. This means it is your duty to provide the least amount of radiation to yourself and your patient during all radiography procedures.

Lastly, it is our policy that all rules related to direct and indirect supervision must be taken seriously by all students. Failure to do so, will result in students being subject to progressive discipline.

Sexual Harassment

The Missouri Southern State College Radiologic Technology Program will not tolerate any form of sexual harassment of its students. Such harassment may be quid pro quo or create a hostile working environment. Any student who feels he or she has been harassed at college or in the clinical setting, should immediately report the incident to the program director or Dean of Health Sciences.

Grading

Program grades on written examinations will be based on the following scale:

92 - 100 \( \text{A} \)
Students must carry a “C” in all courses required for the A.S. in Radiologic Technology Degree. 
**Failure to do so, will result in being dropped from the program.**

**Grades for positioning labs consists of:**
Lab grade - Lab grades consist of a simulation performed independently by the student after watching a demonstration and then practicing. Grades are based on successfully simulating all of the criterion on the rubric distributed by the instructor of the class. The total percentage of the semester grade comprised of lab exercises will vary with each course. Consult the specific syllabi for each course.

**Clinical Classes**
**Grades for clinical classes (Clinical Training 1 – 6) will be based on two areas:**

1. **Final Performance Evaluations (FPE’s)** – Students will receive their Final Performance Evaluation by the clinical instructors each semester that evaluates clinical skills. The evaluation scores may include “S” (satisfactory), “NI” (needs improvement), “U” (unsatisfactory). Any student receiving more than 2 unsatisfactory (U) scores on their clinical evaluation may be dropped from the program. Any scores noted as “needing improvement” (NI) should show improvement at the end of the following semester to avoid further counseling or possible dismissal from the program for clinical performance that does not meet standards.

2. **Clinical Competencies** - A given number of ARRT Clinical Competencies for each semester must be completed as described in each semester’s clinical course syllabi and turned in to the program director by the end of the semester. Failure to complete and show documentation of the completion of such competencies (PCE’s) at the end of the semester will result in an incomplete grade for the clinical class and the student will have one month of the next semester to make-up the deficiency. Failure to do so will result in the student receiving a “no credit” for the class and being dropped from the program. Students must complete at least 15 electives and all of the mandatory competencies to be eligible for graduation at the completion of the program. It is the student’s responsibility to keep track and complete the competencies. If the student has performed certain exams independently, but failed to get checked off and obtain the proper documentation, they will not be given credit and may not graduate from the program as a result. Students should maintain copies of the competencies and turn them in at the end-of-the semester. Six general competencies are also required for successful completion of the program. It is the student’s responsibility to obtain the documentation for each grading form required for documenting completion of each general competency and turning it upon completion of the program.

3. **Clinical objectives** – In addition to clinical competencies, additional clinical objectives are assigned during most semesters. These must be completed each semester to receive
a “complete” in each clinical course. Students should review the objectives associated with each clinical course each semester and are responsible for completion and documentation of them. Failure to complete and show documentation of the completion of them by the end of the semester will result in an “in-progress” grade for the clinical class and the student will have one month of the next semester to make-up the deficiency. Failure to do so will result in the student receiving a “no credit” grade for the class and being dropped from the program. dropped from the program.

Students who are nearing the end of the semester and are short on clinical competencies or objectives should consult with the Director or Clinical Coordinator. In such cases, an attempt will be mad to arrange clinical experiences to facilitate accomplishment of them.

Final grades for all clinical courses will be designated by a “credit” or “no credit”. No letter grades will be assigned to these courses.

Comprehensive Examinations

Students will be given a comprehensive examination during the summer semester of their first year. It will include previously covered material in the course of study for the program. Students must pass the exam with a 75% or better grade. Students not passing this exam will be given an “in-progress” grade for Image Critique and Quality Management. They will be allowed to remediate with program officials and given a second test during the first week of the next semester. Failure to pass the second examination will result in being dropped from the program.

During the summer semester of the second year, students must also pass a comprehensive mock certification examination to be eligible for graduation. Passing is 75%. Students may take up to three examinations. If all three are failed, they will be dropped from the program and receive an “F” in “Advanced Radiology”. Other comprehensive tests may also be given throughout the two-year program cycle as described by class syllabi.

Attendance/Tardiness

Regular attendance in the classroom and clinical rotations is necessary for a student to obtain the necessary knowledge and experience to become a successful radiologic technologist. In addition, good attendance habits will assist students in meeting future employer expectations.

A student with two or more incidents of absence from a didactic class for any reason in a semester will be dropped one letter grade for the course. For example, a student with an 85% would be dropped to 75%. Chronic absenteeism in the classroom (missing a total of four or more classes in a semester or eight in an academic year, summer-summer) will be cause for dismissal from the program. Students may make-up a maximum of one test per semester. The student is responsible for arranging a time with the professor within the first week back from missing class for making up the exam. Students who fail
to do so will receive a “0” for the exam. If the student misses any further exams during the semester, they will receive a “0” grade.

**Students not reporting to class prior to roll call will be marked down as absent.** In addition, students who leave early will be counted absent.

**Students missing more than 3 shifts in their clinical rotations during the academic year (running summer semester – summer semester) will be subject to the student progressive disciplinary ladder.** Each additional absence past this point will result in point deductions as follows: 1st additional – oral warning, 2nd additional – written warning – 3rd additional - dismissal from the program.

All clinical time missed must be made up during the semester in which it was missed. The make-up shift will must be scheduled with a program official (MSSU Director or Clinical Coordinator). The rescheduled shift will be determined by the program official and will in part be based on making sure that the program does not exceed the JRCERT limit on student-to-rom or staff ratio. All makeup time must be made-up up in **8 or 10 hour** blocks, depending on the semester schedule. Students cannot self-schedule themselves for clinical rotations. Due to possible clinical rotation conflicts with other students, this may be scheduled during weekends or evenings.

Students may take one day of funeral leave for immediate family members without having to make up the time. Immediate family members are defined as mother, father, siblings or grandparents. Funeral leave for other family members must be made up as described above. Students wishing to take funeral leave must fill out the emergency leave form and submit it to the the Director or Clinical Coordinator.

Students missing more than **4 clinical days** for any reason in a semester may be dropped from the program. Those missing more than **8 clinical days for any reason in an academic year** may also be dropped from the program.

If a student knows in advance that they may miss class or a clinical rotation for a given reason, they must notify the Director and request the time off by filling out an emergency leave form. The absence must be approved by the Director. **Students should not expect time off from clinical rotations for situations unrelated to emergencies or educational conflicts.** If the absence is not approved and the student does not show up, they will be subject to disciplinary action under the insubordination clause of the program and may be dismissed from the program.

In cases where students are sick or there is a family emergency, students must call in at least **one hour** before the start of their clinical shift or class and notify the Program Director and/or clinical site or the absence will be marked as “unexcused”. Failure to call will result in implementation of progressive discipline. **Two such instances** during the two-year program will result in the student being dismissed from the program.
Tardy is defined as being late for a clinical rotation. Tardiness must be made up by staying over on the day that the student was late. Four such instances in one semester will result in the implementation of the student progressive disciplinary process and possible dismissal from the program. Eight or more instances within a one-year academic cycle (summer - summer semester) will result in dismissal of the student from the program. Tardy is defined as showing up after the student’s shift starts (for instance, showing up at 7:01 if your shift starts at 7 a.m.).

**If students become ill during a clinical rotation, the time should be made up by staying over on the next clinical day worked.**

All make-up time should be scheduled with the Clinical Coordinator and the make-up time documented on the Clinical Make-up Form.

**Transportation and Parking**

Students are responsible for their own transportation to the university and clinical sites. They must park only in areas designated for student parking at the university and follow parking policies at clinical sites. Building and parking facilities at MSSU are accessible to students with mobility impairments.

Parking violations and fines are the responsibility of the student.

**Drug Testing**

Students will go through a drug screening as a condition of acceptance into the program. The drug screening is designed to prevent accepting individuals who use illegal drugs or alcohol that may impair performance or create unsafe conditions for patients or other students/employees. Students testing positive for drugs or alcohol will be immediately dismissed from the program.

Any student may be randomly tested at any time during their tenure as a student. If there is suspicious or erratic behavior that indicates a concern or suspicion among faculty, students or employees at a clinical site, the Program Director has the right to have the student tested at the student’s cost. Students refusing the test may be suspended or dismissed from the program.

Any student testing positive for drugs or alcohol will be dropped immediately from the program.

**Physical Requirements**

Students should have the ability to lift and move patients. They should have the physical ability to lift up to 50 pounds alone with frequent lifting situations. In addition the following are requirements of the program:

Frequent pulling, pushing, stooping and reaching are also required.
Positioning requires standing, moving and assisting patients out of wheel chairs and gurneys as well as helping them move into correct positions for radiographs.

Speaking and hearing abilities are necessary for patient assistance, information and safety concerns.

Visual acuity at both far and near distances, is necessary for performing required clinical and computer-related duties.

Manipulative skills are necessary to safely operate medical equipment and assure patient safety.

**Special Skills and Abilities**

Students should possess the following special skills and abilities in order to effectively function during their tenure and radiologic technology students:

1. Analytical ability necessary to learn proper positioning and exposure factors based on patient size, age and other controlling factors.
2. Interpersonal skills necessary to effectively interact with patients in situations which evoke anxiety or confusion.
3. Ability to work under stress in urgent situations.
4. Ability to read and comprehend technical material.
5. Critical thinking and problem-solving skills used in clinical and classroom situations.

**Physical Appearance**

Students shall be in full uniform when on clinical assignment and during laboratory sessions at MSSU. This includes wearing a name badge and radiation monitoring device. Uniforms should be clean and wrinkle-free. Uniforms should not be low-cut. Students must purchase Hunter green uniforms for the program. They must be embroidered with the official program name. Students must also purchase white tennis-style shoes for clinical rotations. These must be kept clean at all times.

In keeping with established practices of proper hygiene, safety, moral, professional and social values and to provide minimum disruption to patient care, the following guidelines will be followed:

1. When at the clinical site, long hair should be confined or pulled back so hair does not fall forward.
2. Beards and mustaches are acceptable if neatly trimmed.
3. Observe personal hygiene carefully, including brushing teeth, bathing daily, using deodorant and washing hair.
4. Official program uniforms must be worn for lab classes at the University or clinical site (i.e., positioning labs). These must be changed daily. Uniforms should not be worn to outside facilities (i.e., shopping malls etc.) following clinical shifts.
5. All shirts and blouses will be kept buttoned and should not be revealing at the clinical site or in classrooms.

6. No pierced body parts (with the exception of pierced ears) shall be visible.

7. Clothing that is slashed, revealing or suggestive shall not be worn at the clinical site.

8. Clothing that is gang-related is not permitted at school or a clinical site.

9. **Visible tattoos are not permitted at the clinical site.** Forearms, hands, wrists, face, neck and upper chest areas must be **free from tattoos.** Other areas containing tattoos must be covered while the student is in clinical rotations.

10. Make-up must be worn in moderation and fingernails trimmed to a length so that they do not puncture latex gloves. **No false fingernails** are allowed because of the possible spread of pathogenic bacteria.

Failure to cooperate with the above guidelines will result in counseling and possible dismissal from the program.

**Employment**

Working while enrolled in the program is discouraged due to its probable impact on student performance. However, part-time jobs are permitted as long as they do not interfere with the program schedule or performance in the classroom or clinical rotation. **If the Program Director feels that employment is interfering with student performance, the student will be counseled.** If improvement is not seen, the student may be asked to reduce their employment hours or withdraw from the program.

Students working in the field of radiologic technology during the course of the program may not apply those hours toward their clinical requirements or competencies.

**Workplace Hazards and Safety**

Students accepted into the program must follow the following safety precautions:
1. A TB test, MMR (or titer), varicella (or titer), tetanus/diphtheria within past 10 years, hepatitis A and B Twinrix vaccinations (or titers) and flu vaccination are required.
2. Pass a drug test at a time determined by the program.
3. Each student will be issued a radiation monitoring device with requirements to wear it. They will not be allowed to make unsupervised radiation exposures until they have had a basic radiation protection orientation class.
4. Students will be instructed on standard precautions prior to working in a clinical area.
5. Basic body mechanics and lifting techniques will be covered to help prevent injuries.
6. Any student who thinks they may have a contagious disease should report to the
6. Students must attend all orientation required by the clinical site(s) before starting clinical that will cover HIPPA, emergency preparedness, sexual harassment, substance abuse, communicable diseases and workplace hazards. Students are also responsible for following all safety policies given out by the radiology department(s) at assigned clinical sites.

**Communicable Diseases**

Any student who believes they have been exposed to a communicable disease should:
1. Report the incident immediately to the Program Director, who will make recommendations on a course of action. In addition, the appropriate individual at the clinical site should also be notified (Radiology Director and Employee Health Nurse at the clinical site).
2. Report the incident to the appropriate person at the health care facility immediately after the exposure and fill out the necessary paperwork.
3. Students are responsible for following standard precautions and transmission-based precautions at their assigned clinical site(s). Failure to do so may result in injury to the student or patients and could also result in dismissal from the program if the student poses an undue threat to themselves or others at the facility.

**Emergency Preparedness**

In the case of threatening weather, MSSU will notify students in the health science building by activating the alert system inside the building. The notification system will warn students if we are under a tornado threat. In such cases, radiology students will be moved out of the classroom to the lower floor interior hallways away from doors and windows for protection until the all-clear sign.

In the case of a fire, rescue anybody involved and activate the alarm (these are located at the end of the hallways in the Health Science Building) and call the Campus Police at extension 2222.

Bomb threats, violent or criminal behavior and sexual assault should also be reported immediately to the Campus Police. For more specifics on responding to specific emergencies, please consult the emergency procedures listing posted in the Radiology Classroom (Rm 343).

Emergency preparedness will also be covered by individual clinical sites during orientation. Students should follow directives of their respective site.

**Substance Abuse**

Students are prohibited from using alcoholic beverages and illegal drugs at university-sponsored activities. Pursuant to the Drug-free Schools and Communities Act of 1989, MSSU has established a drug and alcohol prevention program for students. (For further information consult the MSSU Student Handbook).

**Holidays**
Classes are not held on holidays observed by the university. School will be closed during the following holidays and breaks: Labor Day, Thanksgiving, Christmas, spring break, Memorial Day and July 4th (see college catalog). **Classes will be dismissed based on the holiday observance published in the schedule of classes.**

**Inclement Weather**

If there is inclement weather and MSSU is closed, Radiologic Technology classes at the university and clinical classes will also be canceled. Students should monitor TV, radio stations and the home page of the MSSU web site (mssu.edu). Cancellation alerts are also sent out via cell phones.

**Smoking Policy**

MSSU is a smoke-free campus. Smoking on the campus of MSSU is prohibited. Clinical sites are also designated as smoke-free campuses. Students are responsible for following the policies in place at their designated clinical facility. Failure to do so may result in dismissal from the program.

**Handicap Access and ADA Accommodations**

The buildings and parking facilities of MSSU are accessible to students with mobility impairments.

If you are an individual with a disability and require an accommodation for class or this program, please notify the instructor or Disabilities Coordinator, at the Student Success Center (417-659-3725). The Disabilities Coordinator has information on a wide array of services available at the center. Students are responsible for initiating the request and providing documentation for requested accommodations.

**University Police**

Call 626-2222 for assistance when off campus or extension 2222 if on-campus.

**Dismissal From Program**

Conduct must meet the standards of the program and the ethical codes of the American Registry of Radiologic Technologists and the American Society of Radiologic Technologists.

Students may be dismissed from the program for the following reasons:
1. Poor performance in the classroom or clinical area (below acceptable levels).
2. Personal behavioral characteristics that interfere with successful performance in the health field or academic environment (i.e., insubordination, use of alcohol or drugs, inappropriate interpersonal behaviors in the classroom or clinical site).
3. Excessive or chronic attendance problems (see attendance/tardiness section).
4. Inappropriate conduct in clinical or classroom areas (i.e., negligence, theft, etc.)
5. Falsification of records or reports (this may include, but is not limited to signing somebody else in for clinicals, a student signing in as “present” when they were not or falsifying clinical PCE forms or any other form used to evaluate student performance).
6. Cheating

The student disciplinary ladder is the primary means of termination. However, students will be terminated immediately if the offense is deemed serious enough by the Program Director. Examples of serious offenses would include, (but are not limited to) cheating, falsifying records (i.e., sign-in sheets, clinical evaluation forms etc.), drug or alcohol use, extremely inappropriate interpersonal behaviors that may prove damaging to patients, faculty or other students, insubordination (refusing to follow the directives of the Program Director, faculty or clinical instructors) or conviction of the student for a crime (other than a misdemeanor) that may, in the judgment of the Director, pose a threat to patients, faculty or students. Students may be terminated by the Director of the program or the Dean of Health Sciences. The student may be asked to leave the clinical area by the clinical area director(s) or supervisor(s). MSSU termination policies apply to students in the program.

Minor infractions are handled through the student discipline ladder.

**Student Discipline Ladder**

1. Minor infractions of policy will result in an oral warning and will be recorded in the student’s file.
2. A second counseling for any type of minor infraction during the school year will result in a written warning and will be recorded in the student file.
3. A third counseling for any type of infraction during the school year will result in a three day suspension from the program.
4. A fourth counseling for any type of infraction during the school year will result in permanent dismissal from the program.

(note: The school year is defined as starting with the beginning of the summer semester and ending with the end of the fall semester the following year)

**Complaints and the Chain of Command**

Any student with a complaint about the program who feels that a program policy and procedure has been unfairly applied or violated must first report to the Program Director. The student must allow
the Director up to **five days** to respond to the complaint before going to the next level. If the student feels they have been treated unfairly, they **must inform the Director they intend to file a complaint with the Dean of Technology**. The Dean will respond within five days. After the Dean has responded, if the student still feels they have not been treated fairly, they have the option to plead their case with the Vice President of Academic Affairs. The Dean must be notified in such cases. A **minimum of five working days** (excluding weekends) must be allowed at each level. **Students not following the chain of command are subject to the student disciplinary ladder** (except when the complaint involves sexual harassment).

**Guidance and Counseling**

Guidance and counseling services are available to students (see MSSU catalog). This may be provided by the Program Director and/or counselors at MSSU through Student Services.

Services include meeting with students having behavioral, personal, clinical or didactic problems. In addition, academic counseling is available through the Program Director. Office hours are available and posted for students seeking counseling with the Director.

Students will also receive counseling at the end of the spring and fall semesters to provide feedback on clinical and didactic progress. This will include both summative and formative advice and is intended to help the student’s didactic and clinical skills needed for successful performance as an R.T.

**Withdrawal**

Students may request a withdrawal from the program. This may be for a variety of reasons such as extended illness or issues in the student’s personal life that may be interfering with academic or clinical performance.

1. Requests must be made in writing and must include the specific rationale for the request.
2. Students will only be allowed to withdraw one time.
3. Withdrawing students must fill out an Exit Summation Form to be considered withdrawn from the program.
4. Students who withdraw are allowed to reapply for the program, but must meet the current admission requirements.

If a student wishes to withdraw from the program for any reason, he/she must first schedule a conference with the Program Director. In case of serious health or personal problems, the student may request to withdraw or be requested to withdraw from the program. In addition to withdrawal from the program, the student must also follow Missouri Southern State University’s withdrawal procedures (withdrawal from the program alone does not mean the student has formally withdrawn from MSSU).

**Re-Admission Policy**
Confidentiality of Student Records

MSSU assures the confidentiality of student education records and as such must follow FERPA. All current student records will be kept in the Program Director’s office and locked during times he/she is absent.

Information may be released to the public regarding student dates of attendance, certificates or degrees earned and awards received.

Information regarding grades, financial aid, student accounts or other information deemed private by the school will not be released unless ordered by court or with written approval from the student.

Venipuncture Policy

Students in their second year of schooling will complete the venipuncture certification course. The student will be required to study and pass a venipuncture written examination with a minimum of a 75% score and to successfully perform venipuncture in a lab. A nurse, laboratory technologist or R.T. from the clinical site may do additional training based on their institutional policies. The students will then perform venipunctures under the direct supervision of an RN, R.T. or laboratory personnel. The student must demonstrate competency based on the criteria outlined on the venipuncture check-list form.

After certification, the student may perform venipuncture under the direct supervision of a radiographer, a physician or a radiology nurse or phlebotomist if allowed by the clinical site. Additional venipunctures will be required to maintain competency during the program.

All clinical site policies must be followed by students performing venipuncture.

National Certification Examination
The graduates of this program are eligible to sit for the national certification examination upon successful completion of all program didactic and clinical requirements and the required ARRT Competencies.

Students with ethical violations before or during the course of the program such as being convicted of a crime, including felony or misdemeanor (with the exception of a speeding or parking violations) should go through the ARRT pre-application process. This includes students who have violations or sanctions of the honor code while enrolled in the program. For further information or questions, consult with the Program Director.

Students preparing for graduation should anticipate paying an examination fee to the ARRT during the first week of the summer semester and filling out the application materials for the examination. In order to be eligible for graduation, they must schedule their exam prior to the end of the summer semester and notify the Director of the program. Upon completion of the program, the ARRT will send the Program Director a request attesting to the fact the students completed the program. The Program Director must approve the request before students are eligible to take the examination. The approval will depend upon numerous factors, including, but not limited to passing the appropriate ARRT competencies, passing all classes and the Mock Registry Examination at the end of the program.

Clinical Site Policies

All students must comply with the policies and procedures of the clinical site(s). Each site will be responsible for updating students on their policies and procedures at the site-specific orientation.

Students must follow JRCERT guidelines regarding R.T.- to- student ratio and room-to-student ratio. JRCERT limits the number of students per room to no more than one student per room or technologist. This means unless students are observing an unusual procedure, there can be no more than one student per room and no more than one student per technologist. Students who fail to observe this ratio will be disciplined according to the disciplinary policy outlined in this manual. By initialing your time sheet each rotation, students are attesting to the fact they have followed this guideline.

Non-Compliance With JRCERT Standards

The school is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). Students will be made aware of the standards of JRCERT in class. If a student feels that the school is not following the standards, the complaint should be brought to the Director who will document it in the JRCERT Complaint File. He/she will then investigate the claim and either:
1. Explain why the claim is unfounded.
2. Make appropriate changes as required by the standards.

The Director will document the result of the action and attach it to the complaint in the JRCERT Complaint File. The Director will respond with a decision to any complaints within five working days.
If changes are required, actual implementation may take longer, depending upon the nature and depth of the modification(s) required to correct a deficiency.

If a student is not satisfied with the actions of the Director, they will be provided access to the Dean of Technology who must reply within five working days.

All such actions will be documented in the JRCERT Complaint File.

Students who feel the above grievance process does not work should contact JRCERT at the following address:
Joint Review Committee on Education in Radiologic Technology
20 N. Wacker Drive
Suite 2850
Chicago, IL 60606-3182
Phone 312-704-5300

Cell Phones
Cell phones are not allowed in the classroom or clinical site. All phones must be turned off and stored away during class and clinical rotations. Cell phones may be used during official lunch hours at the clinical facility. Failure to follow the cell phone policy will result in initiation of the progressive disciplinary process.

Laptop Computers
Laptop computers are not allowed at the clinical site during times when the student is scheduled for clinical hours.

Use of Energized X-Ray Laboratory
Policy:

Students will be oriented to the laboratory during their first semester and must wear their dosimeter when in the lab. No exposures will be allowed without direct supervision during this time. This means that a Program official that is a Registered Radiologic Technologist (R.T.R) must be present in the room at all times with the student wishing to take exposures. Students may schedule the room with the Program Director or Clinical Coordinator for positioning practice during the first semester, but exposures are not allowed during this time. No exposure by students on other students is ever allowed to take place in the room.

During subsequent semesters (after the completion of Radiologic Physics and Introduction to Radiology), students may be assigned projects that require them to take exposures on the anthropomorphic phantom in the laboratory. Such instances must be scheduled with the Program Director who will provide indirect supervision at minimum by being immediately accessible to the student or in some cases may deem it necessary to be in the room with the student.
Students violating any of the above policies are subject to the student disciplinary ladder as outlined in this manual.

Procedure for Scheduling Room

Students must schedule the room when another R.T.R from the Program is immediately (physically) available to assist the student. It may not be scheduled with any other non-R.T.R Program officials (i.e., Department Secretary). The room may be scheduled based on the posted schedule in room 315.

Credit for Class, Laboratory and Clinical Classes

Credit for didactic clock hours are figured on a 50 minute basis, with 16 clock hours equaling one college credit hour.

Laboratory credit hours are figured on a 2:1 basis, with two hours of lab equaling one clock hour of credit.

The following schedule describes the clock to credit hour designation for clinical education:

100 - 129 clock hours = 1 credit hour
130 – 259 = 2 credit hours
260 – 359 = 3 credit hours

Graduation Requirements

In order to be eligible for graduation from the program, students must complete all of the general requirements for the A.S. in Radiologic Technology as described in the MSSU general catalog. In addition, they must have completed all of the ARRT competencies as described by the program and all of the didactic class requirements of the program with a minimum of a “C” in each course. Students must also complete all clinical rotations and have made up any time they missed. In order to receive credit for clinical courses, students must complete the required number of clinical hours and receive a “C” (credit) designation on their transcripts.
Missouri Southern State University  
Magnetic Resonance Imaging Safety Policy

All radiography students will have the opportunity to rotate through the MRI area of their clinical site. For their safety, each student is responsible to fill out honestly and correctly, a form that will enable them to safely occupy the MRI area. This form will screen students for the possibility of metal implants or foreign bodies that would put them at risk in the MRI area. If it is determined by the MRI staff or radiologist that a student would be at risk, then the student will not be allowed to start their MRI rotation.

Neither the clinical site nor Missouri Southern State University will be held accountable for incorrectly documented or omissions of the information provided by the student. The student will receive information regarding radiologic and magnetic safety during orientation.
Missouri Southern State University
Magnetic Resonance Imaging Safety Check List

1. Have you ever worked with grinding metals or had metal fragments in your eyes? No____ Yes___

Do you have or have you had? (Mark yes or No)

Pacemaker, ICD or defibrillator
No____ Yes___

Aneurysm clips, coil or graft
No____ Yes___

Cardiovascular catheter/Swan-Ganz Catheter
No____
Yes___

Heart valve replacement
No____ Yes___

Implanted filter (i.e. Inferior Vena Cava filter)
No____
Yes___

Brain surgery clips
No____
Yes ___

Implanted stimulator (i.e. Vagal nerve, deep brain, TENS, bone growth) No ____
Yes___

Implanted infusion pump, catheter or device
No ____
Yes___

Programmable shunt or VP shunt
No____
Yes___

Mechanically-activated implant or device
No____
Yes___

Internal or external monitoring device (incl. temp. or oxygen probes) No ____
Yes___

Epidural or nerve block catheter
No____ Yes____

Stapes prosthesis, cochlear implant
No____ Yes___

Eye Prosthesis, lens implant, eyelid spring or wire, retinal tack
No ____ Yes____

Internal electrodes or wires
No____ Yes___

Medication patch (nitroglycerine, nicotine, hormones, other medication) No ____ Yes ___

Antimicrobial wound or burn dressing
No____ Yes___

Ingested camera pill for capsule endoscopy
No____
Yes___

Dental implant, dentures or partials
No____
Yes___

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Intrauterine Device (IUD)  
Yes___  
No ____

Penile implant  
Yes___  
No ____

Bullet or metallic fragments  
Yes___  
No ____

Tissue expander (i.e. breast expander)  
Yes___  
No ____

Permanent make-up, tattoo, piercing  
Yes___  
No ____

Hearing aid (remove before entering the MRI room)  
Yes___  
No ____

Artificial or prosthetic limb  
Yes___  
No ____

Joint replacement or resurfacing  
Yes___  
No ____

Any other type of device, implant or prosthesis not listed above  
Yes___  
No ____