City College at Montana State University Billings

Associate of Applied Science (AAS)

Radiologic Technology Program

Student Handbook 2021-2024

Effective January 2023

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Radiologic Technology Program Contact List

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Clinical Coordinator(s)	Weston Jensen, BS, RT(R), ARRT Weston.jensen@msubillings.edu	406-247-3086
	Melanie Schmidt, BS, RT(R), ARRT Melanie.schmidt@msubillings.edu	406-896-5957

Clinical Site Contacts

Big Horn County Memorial	Angela Regalado, (CI)	406-665-9210
Billings Clinic	Hospital Radiology Department	406-435-1310
	Clinic	406-238-2724
	Ortho & Sports Med	406-238-5244
	Michelle Walker (CI)	406-435-1385
Roundup Memorial	Radiology Department Shayne Dollarhide (CI)	406-323-4908
St. Vincent Healthcare	Hospital Radiology Department	406-237-4358
	Ortho Montana	406-237-5050
	Justine Schleining (CI)	406-237-4358

Radiologic Technology Program
Student Handbook Policies Acknowledgment Form

I_____have received the student handbook for the Radiologic

Technology Program beginning_____, 20____.

I have read this student radiography handbook and understand that I am expected to conduct myself in accordance with these policies, procedures, rules and recommendations as a student radiographer.

I have read and been informed of the policies contained herein. I have received the policy of radiation protection as it applies to pregnant and non-pregnant students. Furthermore, I hereby acknowledge receipt of the Ethics and Professional Conduct Policy and the Impaired Student policy. I understand that I may be requested to be tested for alcohol or drugs when there is reasonable suspicion. I also fully understand the consequences of my actions in regard to this policy. This handbook also describes JRCERT Programmatic Accreditation and how to report JRCERT non-compliance.

_____
Signature

_____
Printed name

_____
Date

City College at MSUB Radiologic Technology Program Introduction

This document is designed to explain the roles and responsibilities of all those involved in the Radiologic Technology Program at Montana State University Billings City College. It should be consulted whenever questions arise concerning the issues covering program policies and procedures. Every effort is made to notify everyone involved when these guidelines are altered in any way. All students will be subject to policy changes after the effective date. For policies not listed in this manual including harassment issues, consult the City College at MSUB student handbook.

Purpose

The Radiologic Technology Program of Montana State University Billings City College provides quality-learning opportunities for its students in order to accomplish its mission. It also encourages and supports lifelong learning. The radiography program will prepare students to meet the demands of the profession. This includes technical skills as well as the ability be intellectually adaptive, to communicate well, to think analytically, to integrate knowledge, and to appreciate cultural and social diversity. It is the intent of this program to encourage high ethical values and standards of practice in regard to patient care in the healthcare field.

Program Mission

The mission of the Radiologic Technology Program at City College at MSUB is to provide a comprehensive didactic and clinical education that will produce quality entry-level radiologic technologists to meet the needs of the students, community, state, and nation.

Program Goals & Student Learning Outcomes (SLOs)

Goal #1: Graduates of the program will demonstrate CLINICAL COMPETENCE.

Student Learning Outcomes in support of goal #1-

Students/graduates will employ proper positioning skills.

Students/graduates will generate diagnostically useful radiographs.

Goal #2: Graduates of the program will effectively utilize problem-solving and CRITICAL THINKING skills.

Student Learning Outcomes in support of goal #2-

Students/graduates will integrate critical thinking skills in the practice of diagnostic radiography.

Students/graduates will adapt routine positioning protocols to accommodate to patient conditions.

<u>Goal #3:</u> Graduates of the program will COMMUNICATE effectively with patients and healthcare teams.

Student Learning Outcomes in support of goal #3-

Students/graduates will utilize effective oral communication skills with patients and healthcare staff.

Students/graduates will apply effective written communication skills with peers and program faculty/staff.

Educational Outcomes

Program Effectiveness Data for CC at MSUB 2021 Graduates (*JRCERT defined) and 5 Year Averages (2017-2021)			
City College Montana State University, AAS Radiologic Technology	Program Completion Rate (%)	ARRT 1st Time Pass Rate (%) CC MSUB/National 6 Months After Graduation	Job Placement Rate 12 Months After Graduation (%)
2021	100 (13/13)	76.9 (10/13)/83.8	100 (13/13)
2020	100 (13/13)	92.3 (12/13)/ 86.4	92.3 (12/13)
2019	100 (14/14)	92.9 (13/14)/89	100 (14/14)
2018	92.8 (14/15)	64.3 (9/14)/89.4	85.7 (12/14)
2017	76.9 (10/13)	80 (8/10)/89.3	100 (10/10)
City College Montana State University, AAS Radiologic Technology	5 Year Average: (2017-2021) **93.94 (55/69)**	5 Year Average: (2017/2021) **81.28 (52/64)**	5 Year Average: (2017-2021) **95.6 (61/64)**

Note: ***{Numerical data located in parenthesis indicate; 1) Completion Rate, the number of students who complete the program within 150% of the stated program length; 2) ARRT 1st Time Pass Rate % CC MSUB/National 1st Time Pass Rate indicates the number of students whom passed the ARRT exam the first time divided by the number of students whom took the exam in the program within a 6 month period from graduation as compared to National ARRT 1st Time Pass Rate (i.e.: 92.9 (13/14)/89) in the same 6 month time period, and 3) Job Placement Rate, which is defined as the number of graduates employed in the radiologic sciences 12 months after graduation as compared to the number of graduates actively seeking employment in the radiologic sciences. The JRCERT has defined not actively seeking employment as: 1) graduate fails to communicate with program officials regarding employment status after multiple attempts, 2) graduate is unwilling to seek employment that requires relocation, 3) graduate is unwilling to accept employment due to salary or hours, 4) graduate is on active military duty, and/or 5) graduate is continuing education}.***

1. **Completion Rate**: JRCERT defines completion rate as the number of students who complete the program within 150% of the stated program length. The program must establish a benchmark for its program completion rate. There is no distinction between students who failed and students who decided to change majors for any reason.
2. **Examination Pass Rate**: JRCERT defines the credentialing examination pass rate as the number of student graduates who pass, on the first attempt, the American Registry of Radiologic Technologists (ARRT) certification examination compared with the number of graduates who take the examination within six months of graduation.
3. **Job Placement Rate**: JRCERT defines job placement rate as the number of graduates employed in the radiologic sciences 12 months after graduation as compared to the number of graduates actively seeking employment in the radiologic sciences. JRCERT has defined not actively seeking employment as: 1) graduate fails to communicate with program officials regarding employment

after multiple attempts, 2) graduate is unwilling to seek employment that requires relocation, 3) graduate is unwilling to accept employment due to salary or hours, 4) graduate is on active military duty, and /or graduate is continuing education.

The Radiologic Technology Program Faculty at City College MSUB are applying for JRCERT Accreditation.

The **Joint Review Committee on Education in Radiologic Technology** (**JRCERT**) promotes excellence in education and elevates quality and safety of patient care through the accreditation of educational programs in radiography, radiation therapy, magnetic resonance, and medical dosimetry. In addition, the JRCERT is the only agency recognized by the United States Department of Education (USDE) and the Council for Higher Education Accreditation (CHEA), for the accreditation of traditional and distance delivery educational programs in radiography, radiation therapy, magnetic resonance, and medical dosimetry.

Visit the JRCERT website (http://www.jrcert.org) to learn more about program accreditation and for more information regarding program effectiveness data visit the JRCERT website at https://portal.jrcertaccreditation.org/summary/programannualreportlist.aspx

The Joint Review Committee on Education in Radiologic Technology (JRCERT) follows due process upon receipt of a written, signed complaint containing allegations which indicate that an accredited program, or programs seeking accreditation, may not be in substantial compliance with the relevant accreditation standards or may not follow JRCERT accreditation policies.

To Contact JRCERT:
20 N. Wacker Drive, Suite 2850
Chicago, IL 60606-3182
Phone: (312) 704-5300
Fax: (312) 704-5304

City College at Montana State University Radiologic Technology Program Information

Policy Publications

Policies related to admission policies, tuition and fees, refund policies, academic calendars, clinical obligations, grading system, graduation requirements, and the criteria to transfer credit are made known to the general public in the 2022-2023 Montana State University General Bulletin and the following City College MSUB websites.

Much of this information is also available in the Montana State University 2022-2023 Radiologic Technology Student Handbook and on the City College Montana State University Radiologic Technology Program website at http://www.msubillings.edu/citycollege/Programs/ProgRadTech.htm

Accreditation Information

-Institutional Accreditation:

Northwest Commission on Colleges and Universities (NWCCU)
8060 165th Ave., N.E., Suite 100
Redmond, WA 98052
Phone: (425) 558-4224

-Programmatic Accreditation:

Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Drive, Suite 2850
Chicago, IL 60606-3182
www.jrcert.org
mail@jrcert.org
Phone: (312) 704-5300
Fax: (312) 704-5304

JRCERT Standards as of 2021 available at: https://www.jrcert.org/accreditation-information/accreditation-standards-2021/

Admission Policies

Admissions policies and related items can be found at http://www.msubillings.edu/reg/admission.htm

Tuition and Fees

Tuition and Fee items can be found at http://www.msubillings.edu/finaid/CostOfAttendance.htm

Refund Policy

A copy of the refund policy and dates for receiving refunds are found at

http://www.msubillings.edu/boffice/refund_withdraw_policy.htm

College Catalog
The 2020-2021 College Catalog is found at https://catalog.msubillings.edu/cc/

Montana State University Billings Student Handbook
The Montana State University Billings Student Handbook is found at
http://www.msubillings.edu/VCSA/StudentHandbook.htm

City College Radiologic Technology Program Student Handbook
The City College Radiologic Technology 2020-2021 Student Handbook can be found at
http://www.msubillings.edu/citycollege/programs/pdf/RadTech-Handbook.pdf

Academic Calendars
Academic calendars are found at https://catalog.msubillings.edu/undergraduate/calendar/

Student Clinical Obligations
Clinical Obligations are made known to prospective students in the 2020-2021 General Bulletin, in course descriptions and the degree plan, and on the Radiologic Technology Program degree plan. Additional information related to clinical obligations is noted in the 2020-2021 Radiologic Technology Program Student Handbook on p. 22-53.

Grading System
Grading system items can be found at https://catalog.msubillings.edu/undergraduate/academic-affairs/

Graduation Criteria:
Course and Graduation criteria can be found at https://www.msubillings.edu/future/degrees.htm and
at https://www.msubillings.edu/reg/forms/Application%20for%20Graduation%20Instructions.pdf

Transfer Credit
The transfer credit policy for City College Montana State University Billings is available at
http://www.msubillings.edu/future/myinfotransfer.htm

Course Syllabus
Each course syllabus lists the grading system and is provided by the course instructor.

Website and Program Brochure:
An overview of the Radiologic Technology Program, application instructions and deadlines, program length, curriculum and employment data can be found on the Radiologic Technology Program website at
http://www.msubillings.edu/citycollege/programs/ProgRadTech.htm and
in the printed program brochure.

Program Structure

The Radiologic Technology Program is composed of a program director and two clinical coordinators. In the clinical education setting there are radiographers who have committed to give their time and expertise to the education of the students. These are known as clinical instructors. Each department has staff radiographers, lead technologists, radiology administrators, radiology physician assistants (Billings Clinic only) and radiologists. There are receptionist, transporters, quality assurance technologists, sanitation engineers, and a host of other indispensable individuals that keep the radiology department and hospital running smoothly.

Each class of students will be represented by one or two of their elected peers to provide an avenue of communication between faculty, clinical instructors and other students in the Radiologic Technology Program. Students' representatives are often invited to faculty/clinical instructors' meetings and may request attendance at these meetings at any time. Student representatives are also asked to sit on the Radiologic Technology Advisory Committee.

This committee meets at least yearly as defined by the committee. The goals of the committee are as follows.

1. Maintain contact between the community and the Radiologic Technology program to ensure the program is meeting the needs of the community.
2. Improve communication lines between the administration of the clinical sites, the program faculty and students with respect to meeting the goals and the objectives of the program
3. Assist the program with obtaining equipment, educational opportunities, development of policy, create ideas for program improvement and curricular changes.

Chain of Command:

The City College Radiologic Technology program observes the following Chain of Command **if it is not a student grievance:**

1. Hospital Based Radiologic Technology Program Clinical Supervisor/Instructor(s), 2. City College Radiologic Technology Program Clinical Coordinator(s), 3. City College Radiologic Technology Program Director, 4. City College Nursing, Health & Public Safety Department Chair, 5. City College Dean 6. MSUB Vice-Provost of Student Affairs.

General Program Policies and Procedures

Ethics and Professionalism

Policy

The American Registry of Radiologic Technologists (ARRT) has established a Code of Ethics as part of the Standards of Ethics to serve as a guide for student RTs. In addition, the Radiography Program adheres to the MSU-Billings City College Integrity Code and Student Behavior Code to assure that an environment is conducive for student learning, free of unethical and/or unprofessional behavior. In this spirit and towards those ends the following rules have been developed.

Rules

The following are examples of unacceptable conduct for students enrolled in the Radiologic Technology program at MSU-BCC

1. Failure or inability to perform radiologic technology with reasonable skill and safety (ARRT Rules of Ethics #5)
2. Actual or potential inability to practice radiologic technology with reasonable skill and safety to patients by reason of illness: use of alcohol, drugs, chemicals, or any other material; or as a result of any mental or physical condition (ARRT Rules of Ethics #8)
3. Engaging in unprofessional conduct including but not limited to the following:
    a. Academic misconduct includes all acts of dishonesty in any academically related matter and any knowing or intentional help or attempt to help, or conspiracy to help, another student commit an act of academic dishonesty. Academic dishonesty includes but is not limited to each of the following acts when performed in any type of academic or academically related matter, exercise, or activity.
    b. Cheating-using or attempting to use unauthorized materials, information, study aids, or computer-related information.
    c. Plagiarism-representing the words, data, works, ideas, computer program or output, or anything not generated in an authorized fashion as one's own.
    d. Fabrication presenting as genuine any invented or falsified citation or material.
    e. Misrepresentation-falsifying, altering, or misstating the contents of documents or other materials related to academic matters, including schedules, prerequisites, transcripts, and/or misrepresenting personal identification in an online course, which includes, but is not limited to another person completing course requirements.
    f. Assault, battery, or any threat or force or violence upon a student, college personnel, or any other person
    g. Possession of concealed electronic devices for recording in a classroom or laboratory situation or in a meeting without the permission of the instructor
    h. Failure to abide by these rules will result in probation or dismissal from the program.

CITY COLLEGE AT MONTANA STATE UNIVERSITY
BILLINGS POLICY FOR HEALTHCARE PROGRAMS
SAFETY, STANDARD PRECAUTIONS, CRIMINAL BACKGROUND CHECKS AND URINE DRUG TESTING

Clinical Site Orientation and City College Safety/Standard Precautions Training

All Radiologic Technology students undergo an Orientation Training at the clinical sites, and Safety Training at City College, which includes policies/procedures related to General Radiation Safety, Safety, Chain of Infection, Infection Control, OSHA Bloodborne Pathogens, Hazard Communication, MSDS Data Sheets, Patient Confidentiality, Patient Rights, COVID-19 Precautions, Handwashing, Fire and Electrical Hazards, Slips and Falls, Patient Hazards, Standard Precautions, Radiation Safety in Radiography, Fluoroscopy, Computed Tomography (CT), Nuclear Medicine (NM) and Safety in Magnetic Resonance Imaging (MRI), respectively.

Criminal Background Check and Drug Screening

To promote patient safety and decrease institutional liability, most clinical institutions also require students to have cleared a criminal background and a urine drug check before they will permit the students in the clinical setting. To meet these requirements, City College requires that the check be done prior to placement in any clinical agency. The background check is conducted via the student's online account with **COMPLIO** **(See page 24 for instructions on setting up the COMPLIO account)**. The criminal background and urine drug check is required to be done **before the start of school and on a yearly basis at the student's expense**. The Drug Screening can be done at any of the listed Labs on the COMPLIO website. Students with criminal background and/or urine drug checks that reveal a record and/or positive result will be evaluated individually by a faculty committee and the director to determine whether they will be admitted to the clinical sites.
Failure to be admitted to clinical sites results in the inability to meet program objectives.

PROCEDURE:

1. Prospective students will be informed in college publications and web information that a criminal background check and urine drug testing will be required prior to beginning any clinical work.

2. Criminal Background Check and Urine Drug Testing:
   a. **Follow the instructions on page 24 of this handbook to create the student COMPLIO account on www.msubillingscompliance.com.**
   b. Your cost for each test, plus the processing fee, will be included in your student account (total of $110 for COMPLIO account). The director of the program will be able to access your results

3. Students with background checks and/or urine checks that reveal a record and/or positive result will be evaluated individually by a faculty committee and the director to determine whether they will be admitted to the clinical sites. If the drug screening results in evidence of illegal drugs, the policy of the clinical institution's drug screening policies and practices shall determine the

follow-up and consequences of such findings. Failure to be admitted to clinical sites results in the inability to meet program objectives.

a. The faculty committee and director's evaluations shall include, but not be limited to, the following factors:
    1) Number of offenses or misconduct and the circumstances of each.
    2) Length of time since the offense or misconduct occurred.
    3) Other relevant history.
    4) Evidence of applicant's rehabilitation efforts.
    5) Severity of the offense or misconduct; and
    6) The relevance of the offense or misconduct to responsibilities of the clinical position.

Impaired Student Policy

Any drug that impairs your mental or physical abilities is not appropriate in the clinical setting. The MSU Billings Radiologic Technology Program has a zero (0) tolerance for alcohol and/or drugs in any student's system during any course. All students of the RT program are expected to report for clinical, school and laboratory assignment with no alcohol or drugs or their metabolites in their bodies. Compliance with this policy is a condition of continued enrollment in this program. Failure or refusal of a student to cooperate fully, sign any required document, submit to any inspection or test or follow any prescribed course of substance abuse treatment will be grounds for dismissal.

Enforcement of Policy Based on Reasonable Suspicion. Alcohol/Drug Screening

When the program (clinical or college) officials have a reasonable suspicion that illegal drugs or their metabolites are, or may be, present in a student's body, the student will be required to submit to a urine alcohol/drug test immediately upon demand by the college or clinical education site. No testing of the student will be conducted without the student's consent. HOWEVER, a student's consent to urine drug/alcohol testing is required as a condition of continued enrollment. Refusal of the student to submit to such a test shall be treated as a failed drug test and shall be sufficient reason for termination from the Radiologic Technology Program. Any student failing such a test will be subject to dismissal from the program. Test results that indicate a violation of the policy will be considered a failure of the alcohol/drug test.

A reasonable suspicion may arise from the circumstances of a particular accident or injury occurring at the clinical site; from a physical altercation between student, instructors, clinical personnel and patient; from obvious impairment of physical or mental abilities such as slurred speech or difficulty in maintaining balance; from unexplained significant deterioration in clinical performance or behavior,

such as excessive absenteeism, from reports by instructors or clinical personnel of alcohol or drug use or impairment while at the clinical site; from student's admissions regarding drug use; or from any other reasonable evidence giving rise to suspicion of impairment from or use of alcohol or illegal drugs. In addition, random drug screening is a policy.

Attendance

The Radiologic Technology program will follow the regular MSU Billings City College academic calendar. Summer courses start and end dates will vary from the college calendar to meet the clinical components of the program and obtain the required amount of clinical hours. Excessive absences or tardiness makes it impossible for the student to successfully complete the objectives of the Radiologic Technology Program.
Students are required to attend lecture classes, as missing course lectures will hinder your understanding of the material. Attendance in the classroom will be addressed in each course syllabus. Excessive absences from lectures will result in a deduction in your grade as stated in your course syllabus. Taking time away from classes for family vacations may factor into your grade as addressed in the syllabus.

Attendance in the clinical setting is addressed on page 25-26 of this handbook.

Grading

The City College Radiologic Technology Program Grading Scale is as follows:

A= 100%-93%
B = 92%- 84%
C = 83%- 75%
D = 74%- 60%
F= <60%

All radiography students are required to maintain a specific level of didactic and clinical education quality throughout their educational period. Above average grades in education correlate positively with increasing the chances for having a passing score on the registry examination and more importantly succeeding in the profession.

Students must obtain a "C" (i.e.: 75%) or better in all courses to remain in the program. A grade of "C-" is not a passing grade. A grade of "D" will not transfer to another institution.

Failure of any didactic or clinical education course will lead to dismissal from the program. Readmission to the program is dependent on qualifications of the individual and space available (see Failure policy). Failure of two radiography courses in the entire program will disqualify a student for readmission.

Probation

It is the desire of the program to assist all students to achieve their educational goals; however, when a student willfully violates the program policies and procedures, action will be taken to ensure quality, equity and safety.
A student may be placed on probation for, but not limited to, the following violations:

1. Failure to follow college and program policies and procedures
2. Failure to meet program objectives
3. Failure to maintain clinical proficiency
4. Performing in a manner which jeopardizes safety to self, peers, faculty and/or patients
5. Failure to maintain acceptable attendance standards
6. Violating patient confidentiality and HIPAA
7. Failure to follow professionally acceptable radiation protection practices during the radiology lab and/or at the clinical education setting
8. Failure to maintain a professionally acceptable code of ethics regarding patient care and co-workers (inappropriate conduct befitting the profession)
9. Falsification of records in the clinical education setting
10. Excessive absences or tardiness in didactic (classroom or lab) setting.

Students may be placed on probation for policies not inclusive in this list when they are identified and are violations of program policies or of safety standards put forth by the program and/or clinical education setting.

Students placed on probation will receive one letter grade lower than the grade earned in the course for which the probation was issued. Students are cautioned that this may result in a failing grade.

Violation of any policy that would result in a second probationary status will result in the immediate and automatic dismissal of the student.

Program Progression (Academic and Clinical)

Progression and Graduation in the Rad Tech Program

To progress from one semester to the next and to graduate from the radiologic technology program:

1. All required prerequisite/pre-rad tech courses must be passed with a grade of "C" (i.e.: 75%) or better. Students who receive a grade of "D," "F," or "W" in any course will extend the length of the program and will be subject to the competitive enrollment process to resume coursework.
2. All required radiologic technology courses and co-requisite academic foundation courses must be passed with a grade of "C" or better.
    a. Radiologic Technology courses must be taken in sequence. Example: Third Semester students who do not pass AHXR 160 cannot take AHXR 181 or AHXR 195C in the following semester for example.
    b. Students who receive a grade of "D," "F," or "W" in any Radiologic Technology course will extend the length of the program. Students must follow the Radiologic

Technology Program readmission policy guidelines outlined below.

3. The Student Record must demonstrate progressive growth and development in professional behaviors across the curriculum. (Source of documentation: Student Code of Ethics, Academic probation and suspension; student clinical evaluation; and performance improvement plan record).
    a. Students who do not demonstrate growth in professional behaviors may be placed on Performance Improvement Plan (PIP). See the policy for Problem-Solving Process.
    b. In situations of a serious and critical nature, students may be removed immediately from the classroom, clinical site, or program related activity and may receive a course grade of "F" or "W" and dismissal from the Program. See the policy for Unsatisfactory/Unsafe Student Conduct and Removal from the Classroom or Clinical setting.

Termination/Dismissal

Termination (Withdrawal):

Whenever a student decides to withdraw or terminate association from the program, for whatever reason, the student shall do so in writing to program director. The notification must include the date of withdrawal.

Future reinstatement in the program will be denied if the director has not received written notification of the student's intent to withdraw.

It is the student's responsibility to withdraw from all radiography program courses at the registrar's office. Failure to do so will result in an "F" in all courses. Instructors will not drop a student who wishes to withdraw.

Dismissal/Failure:

The program has a duty to uphold certain standards in regard to the academic and clinical setting. For this reason, a student can be immediately dismissed from the program when a policy or procedure is broken or when the standards of the program have been jeopardized.

Any student in the Radiologic Technology Program can be immediately dismissed from the program for the following reasons:

1. Cheating
2. Failure of a drug test
3. Grade of "D" from any didactic or clinical program course
4. Failure to maintain a cumulative 2.3 GPA while in the program
5. Being placed on probation more than one time in the 2-year program
6. Falsification of records
7. Performing in an unsafe manner in the clinical setting that would jeopardize the health and safety of patients, self and other health care team members

8. Unwarranted conduct as a student radiographer in didactic or clinical courses
    a. Misuse of college or clinical property
    b. Being under the influence while in class or clinical
    c. Committing a felony while in the program
    d. Dishonesty

A student may be dismissed from the program for policies and procedure violations not included in this list when they are identified and would violate the quality, safety or ethical standards put forth by the program. Students will be informed of dismissal/failure in writing and will be required to meet with the program director and/or clinical coordinator.

Reinstatement

A student who earns a final grade below a "C" in any radiography course will be ineligible to continue in the program. Students failing a course may reapply to begin at the level at which they failed. HOWEVER, students are warned that there may not be space available in that course. Students may be reinstated into the radiography program one time only when the course is re-offered in one year, provided space is available.

1. Re-entry into the program must occur within one year
2. Re-entry must be requested in writing to the program director.
3. Reinstatement will require that the student prove competency at the point of exit from the program.
    a. A competency positioning test must be passed with 75% or better
    b. A written course exam must be passed with 75% or better

Reinstatement will be denied for the following reasons:

1. Failure of two or more courses
2. Re-applying after more than 1 year has passed
3. Demonstrated violations of professional ethics and standards of practice
4. Not maintaining a cumulative 2.5 GPA
5. Space is not available in the clinical setting

Academic Due Process

When academic dishonesty is alleged to have occurred, the instructor has the right and obligation to take appropriate action, which may include a verbal or written reprimand or warning, a grade of "F" (failure) for the assignment or test involved or a grade of "F" for the course.

Grievance Procedure

Recognizing that City College and our hospital clinical sites collaborate in the education of the student radiologic technologist, any issues that may arise in the clinical setting, must be discussed with hospital officials and the hospital based Clinical Instructor before involving the college. In the event the issue is

not resolved, City College/MSUB in conjunction with hospital administration will conduct further investigation. Please access https://www.msubillings.edu/vcsa/student_grievance_procedures.htm for more detail about the City College/MSUB Grievance Policy/Procedures. The City College Radiologic Technology Program Grievance Policy/Procedures are indicated below:

City College Montana State University Billings Radiologic Technology Program Student Grievance Procedure

These procedures are designed to provide the student a specific avenue of grievance regarding the decisions or actions of the City College Montana State University Billings Radiologic Technology Program Officials and serve to address any problem or concern that the student believes needs addressed and/or reviewed.

Grievance Definition:

A grievance shall be defined, as any concern, complaint, or dissatisfaction with any aspects of the Program that a student believes is not resoluble by normal informal means of communications.

The following represents the process for formal grievance:

- First, attempt to resolve the problem with the Course Instructor within 5 business days after the event being grieved has occurred.
- If there is a problem with the Course Instructor and it is a Clinical Course, the student should attempt a resolution with the hospital based Clinical Instructor within 5 business days after the event being grieved has occurred.
- The next level of Communication is with the City College Clinical Coordinator(s) within 5 business days after communication about the event being grieved with the Clinical Course Instructor has occurred.
- The next level of Communication is with the Program Director within 5 business days after communication about the event being grieved has occurred with the Course Instructor if it is a Non-Clinical Course or the Clinical Coordinator(s) if it is a clinical course.
- The next level of Communication is with the Nursing, Health and Public Safety Chairperson within 5 business days after communication about the event being grieved has occurred with the Program Director.
- The next level of Communication is with the City College Dean within 5 business days after communication with the Nursing, Health and Public Safety Chairperson has occurred.

- The final level of Communication is with the Vice-Provost of Student Affairs after they have been contacted about the event being grieved by the student or the City College Nursing, Public Health and Safety Chairperson. The Vice-Provost Grievance Process/Procedures/Timelines supersede the City College Radiologic Technology Program Grievance Policy/Procedures/Timelines, and can be found at https://www.msubillings.edu/vcsa/student_grievance_procedures.htm

JRCERT Report of Non-Compliance

If the individual is unable to resolve the complaint with program/institution officials or believes that the concerns have not been properly addressed, he or she may submit allegations of non-compliance to the JRCERT: Chief Executive Officer Joint Review Committee on Education in Radiologic Technology 20 North Wacker Drive, Suite 2850 Chicago, IL 60606-3182 Phone: (312) 704-5300 Fax: (312) 704-5304 e-mail: mail@jrcert.org

The Chain of Command to be followed is indicated below:

Chain of Command:

The City College Radiologic Technology Program observes the following Chain of Command **regarding Student Grievances because of the addition of the Student Resource Officer (SRO) per MSUB:**

1. Hospital Based Radiologic Technology Program Clinical Supervisor/Instructor(s) (MSUB allows a Student Resource Officer (SRO) to initiate a grievance on the student's behalf at this level), 2. City College Radiologic Technology Program Clinical Coordinator(s), 3. City College Radiologic Technology Program Director, 4. City College Nursing, Health & Public Safety Department Chair, 5. City College Dean 6. MSUB Vice Chancellor for Student Affairs and Enrollment Management.

Transfer Policy

Students wishing to transfer into the MSU-Billings City College Radiologic Technology Program are subject to specific requirements. Individuals should contact the program director Victor White, PhD, RT (R) at (406) 247-3086 or at victor.white@msubillings.edu, or the Assistant Director of Jacket Student Central Kirtlye Schuman at (406) 247-3020 or at kirtlye.schuman@msubillings.edu.

Students who wish to transfer from MSU-Billings City College Radiologic Technology Program into another radiography program must meet with the MSU-B program director who will help facilitate transferal into the other program.

Clinical Component

Clinical Education

Students attend clinical education courses during the program. The ARRT requires mastery of specific skills that can only be gained through a hands-on education. A clinical rotation schedule for each clinical site will be provided to the student at the beginning of each term. These schedules are designed to provide the student the best opportunity to learn in a hands-on clinical environment working with patients and certified radiologic technologists. It is **MANDATORY** that all students accepted into the Program purchase access to the ***COMPLIO American Database*** tracking system to successfully **provide current documentation of immunizations, vaccinations/exemptions, MRI Screening (see pages 32-33**), Drug Screening, and a Background Check. **There is a one-time fee** for the duration of the program of **$110.00** that is the responsibility of the student. Students will not be allowed to onboard to clinical sites without purchasing access to COMPLIO and maintaining compliance with all required documentation.

The clinical education will follow the regular MSU Billings City College vacation schedule. The start and finish of the intersession between fall and spring semesters and summer courses may vary from the usual session dates in order to provide the student with the proper amount of clinical time. Other than regularly scheduled school holidays and semester breaks, students are not allowed vacation time during spring and fall semester. However, each student may take one week vacation during summer sessions with the pre-approval of the program director and program clinical coordinators. Requests for vacation time must be made in writing to the clinical coordinators no less than 2 weeks in advance of the requested time off. All missed clinical attendance must be made up by the end of the summer session. See the attendance policy for further information. The clinical rotation schedules between the hospital clinical sites are similar but will vary due to the different structure of each radiology department. Rotation schedules will vary with starting times and may include evening and weekend rotations. All students will rotate to each clinical site within the program.

Students are required to complete rotations as assigned within each clinical setting. Students are expected to meet the objectives of the clinical rotations. Students are responsible for furnishing their own transportation to clinical sites.

The program recognizes the hospitals and clinics may hire students to work as limited permit holders. The Radiologic Technology Program takes no responsibility for any student while he/she is working outside of the program. The student should be aware that the liability insurance provided by the college only covers them while they are participating as a student in the educational program and does not cover a student while employed by a facility or organization. MSU Billings name badges are not to be worn while a student is working as a limited permit technologist.

Students CANNOT be paid by a clinical site while performing their clinical education rotations for the MSU Billings City College Radiologic Technology Program. Failure to follow this policy will constitute fraud and falsification of attendance and will result in immediate dismissal from the program. The student clinical ID badge cannot be worn while working as a limited permit technologist.

Clinical education is graded just as other radiographic courses are. A grade of C or better must be maintained in clinical as in other radiography courses. A syllabus will be provided to all students prior to the start of the clinical assignment of each semester. The syllabus will outline the clinical

requirements for each semester.

Attendance

Attendance at the clinical site is critical to your success in the Radiologic Technology program and therefore ***mandatory***. Clinical time is scheduled between the hours of 5 am and 10 pm and will vary with the scheduled rotations. Shifts may include evenings or weekends as clinical skills progress. Students are required to be punctual for all clinical assignments. If you are going to be late to your clinical assignment you must call the hospital clinical instructor (or designee) at the hospital AND the college clinical coordinators. Arriving 1 minute after the start time of your clinical assignment is considered being late. You should be at your work-station at your start time, not just arriving at the lounge to hang up your coat or put away your back pack.

You are required to provide the college clinical coordinators with proof of your attendance. This will be signed by your clinical instructor at the hospital and will be turned in to the clinical coordinator at the end of the semester. You should keep a copy for your records (see page 27).

***REVISION as of Fall 2022*-** Students beginning the program must purchase access to the **Platinum Planner Tracking App** that can be downloaded onto their individual smart phones. This is a GPS clock-in/out, tracking system that will be used for the duration of the program and will cost the you a **ONE-TIME FEE of $69.00** for full access. This is **MANDATORY**, as the app will track your required hours, comps, log sheets, and any other important clinical documentation. Further instructions regarding Platinum Planner will be given at the clinical site Orientations.

Absences:

1. If you will be absent, you must contact your hospital clinical instructor (or designee) AND the college clinical coordinators by phone each day of the absence. Emails and text messages are not acceptable forms of communicating that you will be absent.
2. Failure to call both places will affect your clinical grade.
3. Any and all absences must be made up.
4. Absences must be made up before the end of the semester in which the illness occurred. The make-up time must be at a time must be approved by the clinical instructor at the facility.
5. Failure to make up missed clinical time by the end of the semester will result in a grade of incomplete in that clinical course. The incomplete will cause the letter grade for the course to be one letter grade LOWER than the earned grade. The student is cautioned that this may result in a failing grade. The incomplete grade must be changed to a letter grade for the course before the student can register for and/or attend any subsequent courses in the program.
6. Emergency absences will be handled on an individual basis
7. Students who are absent due to medical work restriction by a physician, nurse practitioner or physician assistant must present a return to work release by the same physician, nurse practitioner or physician assistant. A copy must be given to both the clinical coordinator and the hospital clinical instructor.
8. Excessive absence is defined as 4 days absence in the clinical setting. This does not have to be consecutive days. Excessive absences will require you to meet with the clinical coordinator and the program director to determine your ability to remain in the program. However, the clinical

grade will be affected.

9. Students may NOT take time off from regularly scheduled clinical time for other academic courses. All personal appointments must be scheduled outside of clinical time if at all possible.
10. Leaving the clinical assignment for any reason without notifying the clinical instructor and Clinical Coordinator will affect your clinical grade.

Make-up Time:

1. Make up of clinical education time must be scheduled in advance and with the approval of the clinical instructor at the clinical education site.
2. The student must submit to the clinical coordinator a signed "Intent to Make up Clinical Time Statement" within 5 days of the absence.
3. Within 5 days of the completion of make-up time, the student must submit to the clinical coordinator the signed "Completion of Make-up Clinical Time Statement".
4. A minimum of 2 hours must be made up at a time. The makeup time must be under the proper supervision of a registered radiographer.
5. Makeup time can be scheduled at any time between the hours of 6 am and 6 pm from the second day of the semester through the last day of finals week.
6. The makeup time will be completed in the rotation in which the absence occurred.
7. Make-up time cannot be made up on holidays or during college breaks without the written pre-approval of the program director.
8. Failure to make up time by the end of the current semester final examinations may result in an incomplete grade for the course, program probation or suspension from the program. Makeup time not completed will affect the clinical grade that may result in a failing grade in the course

Radiologic Technology Program **(This form to be used by student who are enrolled in the program prior to Fall 2022)**

Clinical Timesheet (Revised 3/22/22-JRJ)

Name: _____ **Month:** _____

DAY	Clinical Site	Clock-In	Clock-Out	Total Hours	Tech Initial
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

Clinical Coordinator Approval: _____ **Date:** _____

INTENT OF MAKE-UP FOR CLINICAL EDUCATION ABSENCE

___________________________ __________________________ ______________
Printed Student Name Signature of Student Absence Date

I intend to make-up______ hours of clinical education on_________/________/ _________

I have scheduled these hours from___________am/pm to___________am/pm. I

will be under the supervision of__________________________________, ARRT

I agree to this schedule.__________________________________/ __________________
Clinical Instructor Date

\- -
(Cut here and return top portion to the Clinical Coordinator within 5 days of absence.)

COMPLETION OF MAKE-UP FOR CLINICAL EDUCATION ABSENCE

___________________________ __________________________ ______________
Printed Student Name Signature of Student Absence Date

I made up_______hours of clinical education on_________/________/________between

the hours of__________am/pm and_________am/pm.

Signature of the supervising technologist:___________________________________, ARRT

The verification of completion of this time must be made in writing by the supervising RT immediately upon completion. The student is responsible for submitting this verification of completion to the clinical coordinator within 5 days of completion of the make-up time.

Dress Code

While in the clinical setting, students will wear only uniforms approved by the clinical site and the MSU-B program officials. The following requirement must be adhered to:

1. The use of cell phones and personal pagers during clinical time is inappropriate and will not be tolerated. These devices must be stored away and not carried on your person during hours of patient contact. You may use them ONLY during your lunch break or other times when officially on a "break".
2. The student's ID badge(s) must be worn at all times and be visible. Lead image markers must be used on all radiographic images performed.
3. Students will wear solid gray (Cherokee gray scrubs). No colored piping or colored striping will be allowed.
4. No lightweight or see-through fabric is allowed.
5. Clothing must fit properly. (No baggy pants or pants that drag on the floor. Pants must not fall below your waist.) Your uniform must be clean, neat and in good repair. Torn clothing must be mended before wearing into the clinical site. Uniform tops worn over a white, black or dark blue "T" shirt or long-sleeved t-shirts are acceptable if the bottom shirt is tucked in and not allowed to hang out from under the uniform. Uniform tops should not be skin-tight, but rather appropriately form fitting or of a looser fit.
6. Lab coats may be worn over a proper uniform only. They are not a replacement for a uniform.
7. Mustaches and beards are to be kept always trimmed. Long hair should be tied back or worn so that it does not fall forward of the shoulders. Unconventional hair color and styles are not permitted. Headwear is not permitted (scarves, caps etc.) except in the surgery areas or sterile procedures.
8. Personal hygiene is a must. Body odor will not be tolerated. Uniforms smelling of cigarette smoke are not acceptable.
9. Makeup may be worn with professionalism in mind. As fragrances can be injurious to others, all fragrances (men and women) are prohibited in the clinical setting.
10. All nails should be kept short and neatly groomed. Due to the danger of transmitting disease, the student may not wear acrylic nails in the clinical setting.
11. All tattoos must be appropriate and tasteful or must be always covered.
12. Body piercings that are visible must be removed and they are not permitted while in the clinical setting. (i.e.: lip, tongue, eyebrow, cheek, chin etc.). An exception to this is the allowance of a single nose piercing which must hold a small stud; No hoops/rings.
13. Small stud-type earrings are allowed if no health/safety issue arises. The student must comply with the multiple ear-piercing policies set forth by the clinical site.
14. The use of tobacco in any form is prohibited at the clinical site. Students must comply with tobacco use policy set forth by the clinical site.

All students must adhere to this policy. You will be sent home to remedy the situation if you are not dressed appropriately according to policy. A second violation of this policy will affect the clinical grade.

Emergency Preparedness, Medical Emergencies, Hazards, Accidents & Safety

When a MSU Billings City College radiologic technology student is injured at a clinical site during educational time, injures a patient or another staff member, or a piece of equipment, the following procedure is to be adhered to:

A. As soon as possible and before the end of your clinical shift, you must fill out the hospital clinical site's incident occurrence report form.
B. Make 3 copies and submit the original form to the lead radiologic technologist or technologist in charge
C. Submit a copy of the clinical site incident report to the clinical instructor at the site and the final copy to college clinical coordinator.
D. Present the third copy to the program director and then fill out a separate injury report at City College to fulfill any requirements of the college insurance. See the program officials for help in filling out this form.

If immediate medical attention is required, the student should go immediately to the emergency department at the clinical site. If the injury is minor, the student should immediately visit a clinic or physician of their choice. Students are not covered by Workers Compensation at the clinical sites and are limited by insurance coverage from the MSU Billings City College.

Confidentiality and HIPAA Laws

It is unlawful to discuss the condition of any patient with **anyone** except the attending radiologist or requesting physician, nurse practitioner or physician assistant. Regardless of requests by family members, even a "little hint" of what you may see on the radiographic images is unlawful and will violate program policy and affect your clinical grade.

Oral and written reports (including faxed reports) must never be given over the phone or to any unknown person(s).

FERPA

The Family Educational Rights and Privacy Act of 1974 affords students certain rights with respect to their educational records. No one outside the institution shall have access to nor will the institution disclose any information from students' educational records without the written consent of the students except to personnel within the institution, to officials of other institutions where students seek to enroll, to persons or organizations providing students with financial aid, to accrediting agencies carrying out their accreditation function, to persons in compliance with a judicial order, and to persons in an emergency in order to protect the health or safety of students or other persons. All these exceptions are permitted under the Act. Within the Montana State University-Billings community, only those members, individually or collectively, acting in students' educational interests are allowed access to student educational records. These members include personnel in the Offices of Admissions and Records,

Financial Aid, Business Services, and academic personnel within the limitations of their need to know. At its discretion the institution may provide student directory information in accordance with the provisions of the Act to include the following: name, local and permanent addresses, local and permanent telephone numbers, e-mail address, date and place of birth, dates of attendance, class, college, major, most recent school attended, full-time or part-time status, honor roll, participation in officially recognized activities and sports, weight and height of members of athletic teams, degree(s) and honors conferred, and commencement program information. Students may withhold directory information by notifying the Registrar in writing within two weeks after the first day of class for the Fall Term. The institution honors request for non-disclosure for only one academic year; therefore, authorization to withhold directory information must be filed annually in the Office of Admissions and Records. The law provides students with the right to inspect and review information contained in their educational record. More information about FERPA can be found at

http://www.msubillings.edu/reg/ferpa/FERPA%20Policy%20.pdf

Ethics

When, as a student, you are unsure of your capabilities in any clinical situation, you must seek the assistance and direction of a certified radiologic technologist or the hospital clinical instructor who must be consulted prior to continuing. If, after the fact, you are unsure of your actions, please consult with the college clinical coordinator/instructor and/or the program director.

Professionalism

As stated in the dress code policy, the use of cell phones during clinical time is prohibited. In a like manner, the use of hospital phones for personal use during clinical hours is prohibited. Use your phone or allowable hospital phones ONLY during your breaks and lunch.

Clinical education is like a 2-year job interview. Students are required to be pleasant, courteous, modest, and empathetic at all times with patients, co-worker, and all health professionals during clinical education. Additionally, students should take considerable initiative in seeking out learning opportunities that coincide with educational objectives in both didactic and clinical education

Purpose: The purpose of this policy is to inform the student on Magnetic Wave and Radiofrequency/MRI Safety information.

Policy:

Magnetic Resonance Imaging (MRI) is a diagnostic tool that utilizes a powerful magnet and radio waves to generate images of the body. All students enrolled in the Radiography Program have the choice to observe in an MRI rotation.

The magnet used in MRI is always turned on and certain implanted devices are considered incompatible with this technology. Implanted devices like pacemakers, neurostimulators and some infusion pumps should not be exposed to the magnetic field. All students considering a career in medical imaging should be aware of the potential hazards of exposure to the MRI scanner and the need for careful metal screening. For safety reasons, all students will receive basic MRI safety training prior to entering clinical practicum. Additional information can be found at www.mrisafety.com.

MRI Metal Screening Form

Students who choose to rotate through MRI must complete an MRI Screening Form prior to beginning their scheduled MRI clinical rotation. Students that choose to participate in an MRI rotation, may be asked by a clinical facility if they have a history of metal implants. Certain implanted devices are contraindicated and should not be exposed to the magnetic field. Examples of these devices include:

- Pacemakers
- Neuro stimulators/Biostimulators • Implanted Infusion Pumps/Pain pumps
- Aneurysm Clips
- Certain Stents, Coils and Filters
- Metallic Foreign Bodies
- Intraorbital Metallic Foreign Bodies

MRI Screening Policy

1. Students who choose to rotate through MRI must complete an MRI Screening Form prior to beginning their scheduled MRI clinical rotation.
2. Students who answer "yes" to any of the questions on the MRI Screening Form may be required to undergo additional screening to ensure their safety.
3. Additional screening may consist of further questions, documentation of metal implants, or making sure metal in the eyes was removed.

Please check the circle next to each statement you agree with:

o I have read the MRI Safety Policy, understand the policy and have been given the opportunity to ask questions.

o I understand that the MRI rotation is not a required rotation of the program.

o I have been counseled by program faculty about the dangers associated with the magnetic field used in MRI and understand the importance of metal screening.

Student Printed Name: _____

Student Signature: _____

Date: _____

Faculty Signature: _____

MRI Student Screening Form

Student's Printed Name: _____ Date: _____

MRI utilizes a powerful magnetic that is always turned "on". For safety reasons, anyone who enters the scan room must complete a metal screening history form. All students must complete a screening form prior to a rotation in MRI or clinical practicum. MRI safety screening forms will be kept on file with the program. Do you have or have you ever had any of the following?

Do you have or have you ever had any of the following?

Yes	No	Cardiac Pacemaker
Yes	No	Heart Surgery/Heart Valve
Yes	No	Implanted Cardiac Defibrillator (ICD)
Yes	No	Brain Aneurysm Clips/ Brain Surgery
Yes	No	Shunts/Stents/Filters/Intravascular Coil
Yes	No	Eye Surgery/Implants/Spring/Wires/Retinal Tack
Yes	No	Injury to the Eye Involving Metal or Metal Shavings
Yes	No	Orthopedic Pins/Screws/Rods/Joints/Prosthesis
Yes	No	Neurostimulator/Biostimulator
Yes	No	History of Cancer or Tumors
Yes	No	Radiation Therapy/Chemo Therapy
Yes	No	Previous Back Surgery (Lumbar/Thoracic/Cervical)
Yes	No	Ear Surgery/Cochlear Implants/Hearing Aids/Stapes Prosthesis
Yes	No	Vascular Access Port/Catheter
Yes	No	Metal Mesh Implants/Wire Sutures/Wire Staples, Clips/Internal Electrodes
Yes	No	Electrical/Mechanical/Magnetic Implants?
Yes	No	Tattoo's/Permanent Make-up/Body Piercing/Patches
Yes	No	Dentures/Partials/Dental Implants
Yes	No	Gunshot Wounds/Shrapnel/BB
Yes	No	Do you have pins in your Hair/Clothes/Hair Extensions/Hair Pieces/Wig

List Any Previous
Surgeries:_____
_____

If you answered YES to ANY of the questions above, please explain:

_____
_____
_____
_____
_____
_____

I attest that the above information is correct to the best of my knowledge. I have had the opportunity to ask questions related to MRI safety and I understand the information presented to me. I understand that I may be asked to complete an additional MRI screening form at my assigned clinical agency.

Student Signature: _____ Date: _____
Instructor Signature: _____ Date: _____

City College MSUB General Radiation Safety Policy

It is the responsibility of the student radiographer to ensure that proper radiation protection techniques are utilized in all clinical settings. Radiography students are required to gain knowledge in basic radiation protection techniques prior to performing any radiographic procedure on patients in the clinical setting.

City College will furnish each student in the Radiologic Technology Program with a radiation monitor. It is the responsibility of each student to exchange the monitor each month and to monitor the monthly radiation dose.

The City College Radiation Safety Officer (RSO) will make available to the student's radiation exposure reports on a monthly basis for review purposes. The Pregnancy Policy and Declaration of Pregnancy/Revocation of Pregnancy forms are found in this handbook. Overexposure to a radiation monitor is presumptive evidence of exposure to the individual. In such cases, The **Accidental or Excessive Radiation Exposure Policy for City College MSUB** form must be completed and turned in to the program director within five (5) days of notification of over exposure. Additionally, the overexposure must be reported to the clinical instructor of the clinical education site and to the student. The student will be counseled and advised on the NCRP's limits for radiation doses. **Actual dose limit is no more than 100 mrem of radiation exposure in any given quarter. This level is far below the 5 rem total effective dose equivalent allowed per year by the NRC. If a student receives 100 mrem or more of radiation exposure in any given quarter, they will be advised and counseled regarding their radiation safety practices and A.L.A.R.A.**

For students under the age of 18 years when they start the clinical portion of the program, the Dose Limit is 1 mSv/year or 100 mrem/year). Dose Limits Recommended by NCRP for Student Education and Training Exposures (annual) for students under age 18 years of age include an Effective Dose limit of 1 mSv (100 mrem), lens of eye is 15 mSv (1500 mrem), skin, hands, and feet are 50 mSv (5000 mrem). **If a student under the age of 18 has a whole-body exposure total or exceeds 30 mrem in any given month, the student will be counseled by the City College RSO on safe radiation practices and A.L.A.R.A.**

The following rules shall be observed daily in terms of radiation protection:

A. Wear the radiation monitor on the outside of the lead apron, on the upper left-hand collar.
B. Monitors shall be left in a designated area at the clinical education site daily and not be removed from the site.
C. A voluntarily "declared" pregnant student shall wear an additional radiation detection monitor (fetal monitor) at the waist.

D. Always shield patients and co-workers during any radiation exposure as long as this does not interfere with diagnostic quality, and shielding is placed correctly.
E. Maximum distances should be observed between operator and the radiation source.
F. Except in rare instances, do not hold a patient during a radiographic exposure. Practice proper radiation protection in assisting with fluoroscopic procedures.
G. As consistent with the principle of ALARA, use exposure factors that produce minimum radiation dose to patient and co-workers (high kVp and low mAs)
H. Use appropriate immobilizing devices to avoid repeat exposures due to patient motion.
I. All women of childbearing age shall be asked if they are pregnant before a radiograph is taken.
J. Keep all doors of a radiographic room closed during the exposure

City College at Montana State University Billings (CC at MSUB): Radiologic Technology Program

Student Radiation Dosimetry Log

Student Name: _____

MONTH	YEAR	MREM	LOG DATE	Consultation? Y/N, Date
Sept				
Oct				
Nov				
Dec				
Jan				
Feb				
Mar				
Apr				
May				
June				
July				
Aug				
Sept				
Oct				
Nov				
Dec				
Jan				
Feb				
Mar				
Apr				
May				
Total		0		

Program Director: _____

Pregnancy Policy

All students in the City College/MSUB Radiologic Technology Program will be informed of the recommendations of the NRC relative to radiation exposure limits established for the "***declared***" pregnant woman.

Declaration/Revocation of Pregnancy

Pregnant students may "declare" their pregnancy in writing to the Program Director/Radiation Safety Officer (RSO) at any time, however, declaring pregnancy is completely voluntary. The student is not under any regulatory or licensing obligation to declare the pregnancy. The student also has the right to revoke the declaration at any time for any reason by signing the Revocation Portion of the Pregnancy Policy Form.

The NRC defines the "declared" pregnant woman as:

> A woman who is an occupational radiation worker and has voluntarily informed her employer, in writing, of her pregnancy and the estimated date of conception (see 10 CFR 20. 1003 and 20.1208).
> Details can be found in the NRC Regulatory Guide 8.13. A copy of this document will be provided to, and reviewed with, the student.

The signed declaration of pregnancy, if made, must include the estimated date of conception. This document will become a permanent part of the student's records. The student, the Hospital Clinical Instructor, College Clinical Coordinator and Program Director/RSO shall plan a rotation that is mutually acceptable. **Students whom "declare" their pregnancy shall have no changes made in their educational plan and/or clinical rotations and radiation monitoring unless they request it in writing.**

Radiation Dose Limits for Occupationally Exposed Pregnant Students

The City College Radiologic Technology Program Director/RSO has no requirements to restrict the dose to the embryo/fetus to the lower limit of radiation exposure until the written declaration is made. Once written declaration has been made, the Program /RSO and Clinical Coordinator shall ensure that the dose to the embryo/fetus during the entire pregnancy, due to student exposure does not exceed 0.5 rem (5 mSv).

When a female student declares pregnancy, a separate radiation monitor shall be issued and referred to as a "fetal monitor (badge)". This monitor will be worn at waist level under any available shielding. If the embryo/fetus receives 0.05 rem (.5 mSv) or more during a month, reassignment or restrictions may be necessary.

City College/MSUB Radiologic Technology Program Responsibilities:

1. Provide training to the student on "declared" pregnant category including the NRC's prenatal radiation exposure limits, and the specific steps that must be

taken by the Program once a student declares her pregnancy. The following information shall be emphasized:

a. According to the NRC, if the student voluntarily declares her pregnancy, she grants consent to the program to limit her dose as measured on her radiation monitoring device to 0.5rem (5 millisievert) to the embryo/fetus throughout the entire pregnancy. If no declaration is made to the program, the occupational dose limits to the student remain unchanged.

b. The National Council on Radiation Protection and Measurements (NCRP) recommends the monthly reading not exceed 0.05 rem (0.5 mSv) / month to the embryo/fetus for each month after the pregnancy has been declared in writing. A monthly dose greater than 0.1 rem (1 mSv) should be recognized as a substantial variation above a uniform monthly dose rate.

c. If the dose equivalent to the fetus/embryo is found to have exceeded 0.5 rem (5 mSv), or is within 0.05 rem (0.5 mSv) of this dose, by the time the student declares pregnancy to the Program faculty, the program shall be deemed to be in compliance with NRC regulations if the total additional dose equivalent to the embryo/fetus does not exceed 0.05 rem (0.5 mSv) during the remainder of the pregnancy.

2. Provide a copy of the Declaration of Pregnancy form for the student to sign. The original will be stored permanently in the student's program file.

3. Instruct the student in correct use of the additional radiation monitoring device for fetal exposure monitoring

4. Collect monthly reports to be stored in student's program file.

Responsibilities of "Declared" Pregnant Student:

1. Complete and sign the Declaration of Pregnancy form and give it to the Clinical Coordinator and Program Director/RSO.

2. Receive additional, focused instruction for a declared pregnant student from faculty.

3. Obtain from the City College RSO an additional radiation monitoring device for fetal monitoring

4. Review precautions to be followed to limit radiation exposure to the embryo/fetus:

    - to below 0.5 rem (5 mSv) for the entire pregnancy
    - to under 0.05 rem (0.5 mSv) / month for each month following declaration of the pregnancy
    - using protective devices (such as a lead apron) and following standard ALARA (As Low As Reasonably Achievable) principles

Program/Clinical Completion Options

1. Decide whether or not to continue in the Radiologic Technology Program – including clinicals – **without modification of any activities**. Alternatively, the student may choose another option such as:

Continue in the Program, but with the following modification(s):

a. Excused from Fluoroscopic Procedures in the Imaging Dept.
b. Excused from Surgical Portable X-Ray/C-Arm Procedures.
c. Excused from the Pain Clinic/Fluoroscopy Procedures.
d. Excused from the remainder of 1st Trimester.
e. Excused for the remainder of Pregnancy.
f. A "declared" pregnant student who wishes to remain in the program, but becomes medically unable to perform the clinical duties of a student in the program may request the clinical portion of training be extended beyond the normal 21 month AAS in Radiologic Technology degree completion period to allow completion of competencies and procedures. This request may or may not be granted due to clinical site availability.
g. A "declared" pregnant student who wishes to take a leave of absence from the Radiologic Technology Program. She can then be reinstated at the beginning of the same semester in the following year upon student request and clinical availability. The reinstatement date shall assure completion of all course and laboratory activities within City College Radiologic Technology Program and ARRT (R) Examination requirements.

Attendance Policies

The attendance policy (including excessive absence and makeup policy) will apply during pregnancy. Clinical competencies must also be considered. A student cannot graduate if competencies are not completed. Pregnancy may cause a student to be unable to obtain certain competencies in a timely manner and therefore not meet graduation requirements, unless an extension is asked for and granted by the Program Director/RSO and the Clinical Coordinator.

Declaration/Revocation of Pregnancy Form

I,_____, do hereby make this voluntary declaration/revocation of pregnancy. My estimated date of conception was_____.

Under the provisions of **10CFR Parts 20.1003 and 20.1208;**

- I will be required to obtain an additional radiation monitoring device for fetal exposure monitoring, and to turn in monthly reports to the Program Director/RSO/Clinical Coordinator;
- My exposure will not be allowed to exceed 0.5 rem (5 millisievert) to the embryo/fetus during my entire pregnancy from occupational exposure to radiation;
- This limit includes exposure I have already received since conception;
- If my estimated exposure has already exceeded 0.5 rem (5 mSv), I will be limited to no more than 0.05 rem (0.5 mSv) for the remainder of my pregnancy, spread evenly over the remaining pregnancy; and
- I may revoke this declaration at any time, for any reason, by signing the *Revocation of Declaration of Pregnancy* at the bottom of this form.
- I have received a copy of NRC Regulatory Guide 8.13, and instruction from faculty.
- Program Director/Radiation Safety Officer (RSO) acknowledges that the above individual has submitted a Declaration/Revocation of Pregnancy statement. The Program Director/RSO acknowledges their responsibility to ensure that this individual is properly trained with regard to radiation protection, proper fetal exposure monitoring, and potential exposure risks to her unborn child.
- **I,_____understand that I may continue my clinical experience without modification, unless otherwise requested, and may, with my signature below, revoke this declaration at any time for any reason.**

Voluntary declaration of pregnancy:

Student_____ Date:_____
Radiation Safety Officer (RSO) _____ Date:_____
Radiologic Technology Program Director: _____ Date:_____

Revocation of voluntary declaration of pregnancy:

Student_____ Date: _
Radiation Safety Officer (RSO):_____ Date: _
Radiologic Technology Program Director: _____ Date: _

Accidental or Excessive Radiation Exposure Policy for City College MSUB

Proper radiation safety protocols are always followed in the Radiologic Technology Program at City College Montana State University Billings. All faculty, staff and students adhere to As Low as Reasonably Achievable (A.L.A.R.A.) and the cardinal radiation protection rules of Time, Distance and Shielding. If accidental radiation exposure does occur from an x-ray machine (i.e.: Radiography and Fluoroscopy (R & F) unit, portable unit, mobile unit, DXA unit, CT unit and/or fluoroscopy/C-Arm unit) it will be treated as an unusual occurrence and an incident/unusual occurrence report shall be filled out by the individual accidentally exposed to ionizing radiation.

Nuclear Regulatory Commission (NRC) Occupational/Student Doses Limits

(1) An annual limit, which is the more limiting of—
(i) The total effective dose equivalent being equal to 5 rems (0.05 Sv); or
(ii) The sum of the deep-dose equivalent and the committed dose equivalent to any individual organ or tissue other than the lens of the eye being equal to 50 rems (0.5 Sv).
(2) The annual limits to the lens of the eye, to the skin of the whole body, and to the skin of the extremities, which are:
(i) A lens dose equivalent of 15 rems (0.15 Sv), and
(ii) A shallow-dose equivalent of 50 rem (0.5 Sv) to the skin of the whole body or to the skin of any extremity.
(b) Doses received in excess of these annual limits, including doses received during accidents, emergencies, and planned special exposures, must be subtracted from the limits for planned special exposures that the individual may receive during the current year (see § 20.1206(e)(1)) and during the individual's lifetime (see § 20.1206(e)(2)).

MSUB' Student Radiation Exposure Policy is such that a student, while enrolled in the MSUB Radiologic Technology Program, **should not attain a dose level of 100 mrem or more in any given quarter, or if the student is below 18 years of age, has a whole-body exposure total or exceeds 30 mrem in a given month, the student will be counseled by the City College RSO on safe radiation practices and A.L.A.R.A.** The student's radiation dosimeter reading will be used to allow the RSO to calculate student exposure from the received dose using appropriate formulas and protocols. A copy of the unusual occurrence report and the approximate dosage based on a phantom exposure using the same technique and machinery with a phantom and radiation detector in place of the person accidentally exposed may also be performed.

All documentation and reporting of this incident shall go to the Clinical Affiliate Radiation Safety Officer and the City College Radiologic Technology Program Director and RSO at City College MSUB.

Proper radiation safety and operation of equipment is covered in Technical Imaging and Radiobiology. In addition, a radiation safety-training course shall be conducted for all faculty, and staff using x-ray equipment in the City College MSUB Radiologic Technology Program as needed to reduce the likelihood of such occurrences. The City College Radiologic Program Director will conduct the training.

The Radiologic Technology Program at City College MSUB does not include radioisotopes or radiation therapy equipment, so such exposures are not possible, and hence are not covered by this policy.

Accidental/Excessive Radiation Exposure Incident Notification Form

If an incident of accidental and/or overexposure of ionizing radiation occurs at a City College Radiologic Technology Program Clinical Site or in the City College Radiology Laboratory, the Program Director and Radiation Safety Officer (Clinical Facility and City College) must be notified in writing using this form.

Radiation Exposure Level:_____
(If 100 mrem or more in any given quarter and if the student is under 18 years of age, has a whole-body exposure total or exceeds 30 mrem in a given month, the student will be counseled by the City College RSO on safe radiation practices and A.L.A.R.A.

Date of Overexposure or Accidental Exposure: _____

Location of Overexposure or Accidental Exposure: _____

Description of Event:

Student Signature/Date: _____

Radiation Safety Officer Signature/Date:_____

Radiologic Technology Program Director Signature/Date: _____

Repeat Radiograph Policy

All radiographs taken by a student must be approved by the supervising or lead technologist, a certified staff radiologic technologist or the clinical instructor before the patient is dismissed from the radiology department.

If a radiograph must be repeated for any reason, the following procedure must be followed:

1. The student must discuss with the supervising technologist the purpose for the repeat exposure.
2. The student must repeat the radiograph in the presence of a radiologic technologist who understands the reason for the repeat exposure. This ensures that the proper corrections were made by the student.
3. All radiographic images that were repeated must be recorded on the repeat log. The radiographer who directly supervised the repeat shall sign the repeat log by the end of the day that the repeat exposure was taken. The repeat log shall be retained by the program at the completion of the program.
4. The repeat log is required to help the student and clinical instructor identify recurring repeat patterns. The student may be required to perform additional study if a pattern is established.

Violation of the repeat policy shall affect the clinical grade and possible program dismissal

Supervision Policy

The clinical education settings are required to have the capacity for operating without relying on student manpower. There must be at a minimum of one technologist for each student at the facility.

All radiography students shall always have the appropriate supervision during clinical education. The level of supervision will be determined by the completion of competency evaluations of the students. All students must have direct supervision for every procedure performed until a successful competency evaluation has been achieved.

Upon successful completion of a competency evaluation, students may perform procedures under indirect supervision.

All repeat radiographs must be directly supervised by a qualified radiographer regardless of the student's level of competency.

Students must have all radiographic images approved and documented by a qualified certified technologist before those radiographic images are sent to the radiologist for diagnosis.

Direct supervision is defined as a student under the following parameters:

a. A qualified radiographer reviews the procedure in relation to the student's achievement.
b. A qualified radiographer evaluates the condition of the patient in relation to the student's knowledge
c. A qualified radiographer is present **during** the conduct of the procedure.
d. A qualified radiographer reviews the procedure and images with the student and approves the procedure
e. A qualified radiographer is present **during** the student performance of any repeat of any unsatisfactory radiograph.

Indirect supervision is defined as that supervision provided by a qualified radiographer immediately available to assist students regardless of the level of student achievement. Immediately available is interpreted as the presence of a qualified radiographer adjacent to the room or location where a radiographic procedure is being performed. It does NOT mean that the radiographer is available by phone or pager. This availability applies to all areas where ionizing radiation equipment is in use.

Supervision: Mobile Radiography

Radiography students **must be accompanied by a qualified radiographer at all times during mobile procedures to follow direct supervision policy**. Appropriate protective apparel must be worn during the performance of all mobile procedures. Refer to the safety, protection, and radiation monitoring policy.

Supervision: Make up Time
All clinical time which is assigned as make-up time for a previous absence shall be under direct supervision of a licensed, registered radiographer. A student shall not take the place of a radiographer.

Supervision: Repeat Exposure

Whenever an image must be repeated for any reason, it shall only be competed in the presence of and with direct supervision by a licensed, registered radiographer.

Violation of the policy will result in probation, which will affect the clinical grade.

Holding of Patients and the Image Receptor (IR)

City College Radiologic technology students are not to hold patients or the image receptor (IR) at any time for any reason during their laboratory/clinical experience while performing radiographic examinations.

Performance Evaluations

A performance evaluation is performed at least three times per semester by the technologists and the clinical instructors at the clinical education settings. These evaluations are a mechanism to allow the student to be aware of their performance while in the clinical education setting.

Students are being monitored and evaluated during the entire semester and are graded as such. The performance evaluation is not a snapshot of any one day but rather a compilation of work attitude, quality, quantity, ethics, responsibility and progress while in the clinical education setting. Each of the 12 areas of the Student Performance Evaluation are evaluated as either:

Exceeding Expectations (3 points); Meeting Expectations (2 points) or Not Meeting Expectations (1 point). While a student should strive for the highest grade, he/she must understand that meeting expectations is what is expected and is a normal grade.

The student evaluation forms are electronically sent to the clinical instructors (CI's) at each clinical site, via Qualtrics, to disperse to random technologists who have worked closely with each student. The submitted Qualtrics forms are then automatically sent to a secured online collection system and the Clinical Coordinators and Program Director are the only individuals with password protected access to the student evaluations and are notified of the completed submissions via email. The student evaluation forms are kept safe and confidential and the Clinical Coordinators share the scores and recorded comments with each student, maintaining privacy and confidentiality.

Clinical Evaluation Due Process Policy and Procedure

It is the policy of the radiography program to provide all students with the opportunity to comment on their clinical evaluation. The student's signature is not an indication of agreement but a validation of discussion with the clinical instructor. In the event the student disagrees with the evaluation, to the extent of non-acceptance, the student shall abide by the following procedure:

1. Within 3 days after receiving the evaluation, the student shall discuss with the clinical instructor who issued the evaluation the reasons for the dispute.
2. If the issue has not been resolved after discussing the evaluation with the clinical instructor, the student shall meet with the clinical coordinator and clinical instructor together within 5 days of the evaluation issue date.
3. Within 2 weeks (10 days) of the evaluation issue date the student; clinical coordinator and clinical instructor shall jointly review the evaluation. In the event of faculty or CI absences, a mutually agreed upon date shall be set in a timely fashion so as to facilitate the student's education.
4. Immediately following the review, the student may request a re-evaluation performed jointly by the clinical instructor and the college clinical coordinator.
5. In the event of a re-evaluation, the new evaluation will supersede the original and become a portion of the clinical grade.
6. All discussion and applicable re-evaluations must be completed within 1 month of the initial evaluation.
7. If the issue has not been resolved following the joint re-evaluation, the student is referred to the college grievance procedure.
8. All evaluations and re-evaluations will become a part of the program's student records.

Student and Program Faculty Evaluation of the Clinical Instructors and the Clinical Sites

The students and program faculty will evaluate the clinical instructors (CI's) and clinical sites on a regular basis. Students will be given the opportunity to evaluate their respective CI's and clinical sites each semester and for Program Faculty, evaluations will be conducted as needed, but will be a minimum of at least once per year for all CI's and clinical sites. The results of this data will be used by program faculty to make improvements in clinical education and overall program efficiency and will be shared in monthly CI meetings at the clinical sites and with members of the Advisory Board at least once per year or as needed.

MSUB City College Clinical Site (circle one) St. Vincent or Billings Clinic

Student Evaluation of Radiologic Technology Clinic Sites Name:

Not only do the staff at the clinical sites evaluate your student performance, but the clinical sites would also like you to evaluation the clinical sites' effectiveness at providing a quality educational experience.
At the bottom of this page is a list of teaching skills to use as a reference.
Some of you may have a temptation to be vindictive. Please don't do that. Be objective and professional.

5 = Excellent 4 = Very Good 3 = Good 2 = Needs Improvement 1 = Poor

1) How would you rate your overall clinical experience?
Hospital 5 4 3 2 1 Please give specifics
Clinic 5 4 3 2 1 Please give specifics

2) How would you rate the knowledge and teaching ability of the technologists in this department?
Hospital 5 4 3 2 1 Please give specifics
Clinic 5 4 3 2 1 Please give specifics

3) How would you rate your ability to learn your radiologic skills within this department? Such as encouraging you to perform or assist in exams and procedures & be involved as a radiographer.
Hospital 5 4 3 2 1 Please give specifics
Clinic 5 4 3 2 1 Please give specifics

4) What Technologist/RPA/Radiologist/Management did you feel did a great job in teaching and mentoring you in your clinical rotation? What did they do to enhance your clinical experience? Who? (May provide more than one)

5) Was there any Technologist/RPA/Radiologist/Management that you had difficulty in working with?
Who? What issues did you encounter? (May provide more than one)

Reference List

The clinical environment promotes individual accomplishment of educational goals.
Technologists demonstrate an interest in teaching and sharing information with the student

Encourages me to do exams on my own	Allows two-way communication to take place
Willing to provide assistance when I need it	Good role model for radiography and patient care
Willingness to review the exams I have performed	Fair and unbiased in Student Performance Evaluations
Demonstrates a positive attitude toward students	Makes effective use of constructive criticism
Explain concepts and procedures clearly	Willing to supervise repeat films that I do
Very approachable when I have a question	Encourages me to use knowledge from class

City College Montana State University
Clinical Instructor Evaluation

Instructor Being Evaluated: **Date:**

Evaluator: Date:

Legend:

5	4	3	2	1
Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly Disagree

1. The instructor made the objectives and criteria of the clinical rotation clear.

5 4 3 2 1

2. The instructor assigned/approved patient assignments which promoted learning.

5 4 3 2 1

3. The instructor was available to work with individual students during assigned clinical hours.

5 4 3 2 1

4. The instructor demonstrated competency in her/his field of knowledge.

5 4 3 2 1

5. The instructor encouraged students to apply theory to the clinical situation.

5 4 3 2 1

6. The instructor used pre/post conference time effectively by stimulating problem solving and critical thinking.

5 4 3 2 1

7. The instructor used pre-post conference time effectively by stimulating problem solvingand critical thinking.

5 4 3 2 1

8. The instructor provided encouragement to all students.

5 4 3 2 1

9. The instructor made specific comments on assignments.

5 4 3 2 1

10. The instructor facilitated critical thinking by asking appropriate questions of students.

5 4 3 2 1

11. The instructor was supportive of students when dealing with staff personnel at the clinical sites.

5 4 3 2 1

12. The instructor encouraged reflection when discussing [problems that may have impeded learning.

5 4 3 2 1

13. Assigned forms/papers were corrected and returned in a timely manner.

5 4 3 2 1

Comments:

CITY COLLEGE
MONTANA STATE UNIVERSITY BILLINGS

Performance Improvement Plan (PIP)

On the following date_____, we_____met with the student _____to discuss an issue of concern.

Expectations have been clarified and we have discussed a plan that will meet all parties' needs.

1. This individualized plan includes the following:

2. It is understood by the student and faculty members that in addition to this plan the student must meet the course/clinical objectives of Radiology Course AHXR _____ and corresponding didactic courses for each semester. Each semester serves as a prerequisite to the subsequent semester.

_____ _____

Student Faculty

_____

Faculty

1 copy – student

1 copy –student file

1 copy – attach to clinical evaluation

Performance Improvement Plan (PIP) Notice

Student:

Directions: Complete the form using additional paper if necessary. Give a copy of the Performance Improvement Plan to the student. Place the original in the student's file.

1. Overview of the Incident(s):

2. Performance improvement goals:

3. Needed training and direction

4. Timeframe for improvement

5. Consequences

6. Student input/acknowledgment

_____ I have read and understand this Performance Improvement Plan Notice.

____ I agree to the terms of this plan. ____ I disagree with this notice/plan.

Student Comments:

Student Signature:_____ Date:_____

Faculty/Staff Signature:_____ Date_____

Competency Evaluations

The philosophy of the program is founded on competency-based education. The student progresses from theory and foundations in the classroom and lab to hands on work with patients in the clinical setting. In the first clinical semester of the program, initially the student should be assisting the radiographer in the performance of procedures that have been studied in class. Clinical objectives have been designed to help the student learn and assist as clinical education progresses. The objectives are stated in the syllabus for each clinical course.

After gaining experience through observation in the various procedures outlined in the clinical objectives, the student moves into the performance stage in which the student actually performs the procedures under the direct supervision of a radiographer.

Students must demonstrate competence in all six patient care activities listed in the general patient care tracking form. These activities should be performed on patients; however, simulation is acceptable if regulations prohibit students from performing the procedures on patients.

There are core competencies that all individuals must demonstrate to establish eligibility for the national ARRT certification. These requirements are in addition to graduation from an educational program accredited by a mechanism acceptable to ARRT. The requirements listed are the minimum core clinical competencies necessary to establish eligibility for participation in the ARRT Radiography Examination. ARRT encourages individuals to obtain education and experience beyond these core requirements. This document will be periodically updated to reflect changes in the requirement of professional practice.

Students must demonstrate competence in all 31 mandatory procedures listed in the mandatory tracking form. These procedures should be performed on patients; however, up to eight (8) mandatory procedures may be simulated if demonstration on patients is not feasible. **As of Fall 2022, these competency skills are logged and tracked in the secure PLATINUM PLANNER online tracking platform.**

Because the mandatory procedures do not cover the full range of clinical competencies, elective procedures were added to increase the skill level of radiographer. Students are required to demonstrate competence in 15 of the 35 elective procedures listed in the elective evaluation tracking form. Students MUST select one competency from the head category, and two procedures from the fluoroscopy category. One of the fluoroscopy procedures must be either an UGI or a BE. Elective procedures should be performed on patient; however, 5 of the 15 may be simulated if demonstration on patients is not feasible.

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Radiologic Technology
Pre-Competency Evaluation

Exam: _____ Student: _____

Patient # _____ ☐ Simulation

	The student:	**Yes**	**No**	
1.	Properly evaluates requisition?	_____	_____	
2.	Obtains clinical history?	_____	_____	
3.	Properly prepares procedure room?	_____	_____	
4.	Properly identifies patient?	_____	_____	Mandatory
5.	Inquires about pregnancy (when applicable)?	_____	_____	
6.	Communicates with patient?	_____	_____	
7.	Practices radiation protection (collimation, shielding, etc.)?	_____	_____	
8.	Positions patient properly?	_____	_____	
9.	Sets proper technique or AEC?	_____	_____	
10.	Gives proper breathing instructions?	_____	_____	
11.	Properly marks with R or L marker?	_____	_____	Mandatory
12.	Uses proper SID?	_____	_____	
13.	Properly aligns tube and centers to part?	_____	_____	
14.	Utilizes proper tube angle?	_____	_____	
15.	Imprints proper patient information on images?	_____	_____	
16.	Completed procedure in a timely manner?	_____	_____	
17.	Completes procedure with no repeats?	_____	_____	Mandatory
18.	Properly dismisses patient?	_____	_____	
19.	Completes paperwork and cleans room?	_____	_____	
20.	Demonstrates confidence?	_____	_____	

NOTE: The student must provide this form to the evaluator prior to the attempted competency. It must be turned in to the clinical coordinator regardless of the score. 5 or more "No" ratings or a "No" on any one of the **Mandatory** items on the objectives list will constitute a failed attempt at this competency. Simulated competencies must be supervised by a clinical instructor or program faculty.

Evaluator's signature:_____ **Date:** _____

CITY COLLEGE
MONTANA STATE UNIVERSITY BILLINGS

Radiologic Technology
Competency Evaluation

Exam: _____ Student: _____

Patient # _____ ☐ Simulation

	The student:	**Yes**	**No**	
1.	Properly evaluates requisition?	_____	_____	
2.	Obtains clinical history?	_____	_____	
3.	Properly prepares procedure room?	_____	_____	
4.	Properly identifies patient?	_____	_____	Mandatory
5.	Inquires about pregnancy (when applicable)?	_____	_____	
6.	Communicates with patient?	_____	_____	
7.	Practices radiation protection (collimation, shielding, etc.)?	_____	_____	
8.	Positions patient properly?	_____	_____	
9.	Sets proper technique or AEC?	_____	_____	
10.	Gives proper breathing instructions?	_____	_____	
11.	Properly marks with R or L marker?	_____	_____	Mandatory
12.	Uses proper SID?	_____	_____	
13.	Properly aligns tube and centers to part?	_____	_____	
14.	Utilizes proper tube angle?	_____	_____	
15.	Imprints proper patient information on images?	_____	_____	
16.	Completed procedure in a timely manner?	_____	_____	
17.	Completes procedure with no repeats?	_____	_____	Mandatory
18.	Properly dismisses patient?	_____	_____	
19.	Completes paperwork and cleans room?	_____	_____	
20.	Demonstrates confidence?	_____	_____	

NOTE: The student must provide this form to the evaluator prior to the attempted competency. It must be turned in to the clinical coordinator regardless of the score. 5 or more "No" ratings or a "No" on any one of the **Mandatory** items on the objectives list will constitute a failed attempt at this competency. Simulated competencies must be supervised by a clinical instructor or program faculty.

Evaluator's signature:_____ **Date:** _____

ARRT Procedure Tracking

The ARRT has determined that there are specific groups (categories) of procedures that all technologists (and students) must have mastered in order to be competent radiographers (see the tracking forms).

Students are required to keep track of all radiography procedures that they perform while in an educational setting. The following forms are designed to help you log all examinations under the categories that are set by the ARRT. This will help in determining your readiness for evaluation and competency. It is suggested that a minimum of 5 procedures be completed prior to asking for a competency evaluation in any category. A variety of patient types will ensure that the student is indeed capable of performing procedures in any circumstance. **As of Fall 2022, these competency skills are logged and tracked in the secure PLATINUM PLANNER online tracking platform.**

CITY COLLEGE
MONTANA STATE UNIVERSITY BILLINGS

Radiologic Technology Program
General Patient Care Tracking Form

Student:_____

Skill	Evaluation Date	Verified by
CPR		
Vital Signs (B/P, pulse, respirations)		
Sterile and aseptic technique		
Venipuncture		
Transfer of a patient		
Care of patient medical equipment (e.g. oxygen tank, IV tubing)		

ARRT (R) Imaging Procedures Tracking

ARRT (R) Candidates must demonstrate competence in all 37 procedures identified as mandatory. Procedures should be performed on patients whenever possible. A maximum of eight mandatory procedures may be simulated if demonstration on patients is not feasible. Candidates must demonstrate competence in 15 of the 34 elective procedures. Candidates must select at least one of the 15 elective procedures from the head section. Candidates must select either upper GI or contrast enema plus one other elective from the fluoroscopy section as part of the 15 electives. Elective procedures should be performed on patients whenever possible. If demonstration on patients is not feasible, electives may be simulated. Institutional protocol will determine the positions and projections used for each procedure.

Demonstration of competence must include:

1) Patient Identity Verification
2) Examination Order Verification
3) Patient Assessment
4) Room Preparation
5) Patient Management
6) Equipment Operation
7) Technique Selection
8) Patient Positioning
9) Radiation Safety
10) Imaging Processing
11) Image Evaluation

An up-to-date list of ARRT (R) Mandatory and Elective Competencies can be found at file:///E:/JRCERT%20STANDARDS%202022_JRJ/ARRT%20RAD%20Competency%20Requirements%202022.pdf

As of Fall 2022, these competency skills as well as any other clinically related documentation are logged and tracked in the secure PLATINUM PLANNER online tracking platform.

City College MSUB ARRT Procedure Log Sheet

	Date	PACS Number	Exam	Transport	Observed	Performed	*Repeat?	RT Initials
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
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40								

ARRT Limited Scope of Practice Examination

All students in the City College MSUB Radiologic Technology program **may take the Limited Scope of Practice in Radiography Exam administered by the ARRT if they desire to, but it is not mandatory that they do so.** Passage of this exam with a score of 70 or higher will allow students to apply, and if hired, work as Limited Radiographer at Advanced Care Hospital of Montana, Billings Clinic, St. Vincent's Healthcare and/or other clinical sites while a City College/ MSUB Radiologic Technology student **as long as Limited Radiologic Technologist's hours worked by the student do not conflict or interfere with required clinical hours required to graduate from the City College/MSUB Radiologic Technology Program and to sit for the ARRT (R) examination.**

For more information about this examination, please visit https://www.arrt.org/docs/default-source/state-licensing/limited-scope-handbook.pdf?sfvrsn=22

For information related to obtaining a Limited Permit in Radiography in the State of Montana, please visit http://boards.bsd.dli.mt.gov/rts#1?2 or see the information below.

State of Montana Board of Radiologic Technology Limited Permit X-Ray

The following outlines general licensing information. For specific information on filing an application, you will need to obtain the license application which includes a detailed listing of the requirements.

To apply for the Limited Permit Holder License using the online application please click here
Please review the Limited Permit Holder checklist here.

A. Licensing Fees: All Fees are Non-Refundable
Application: $100.00

B. Education Requirements:
The course shall be a minimum of 104 hours in length, approved by the board meeting the qualifications of examination for each specified procedure:

- fundamentals of radiobiology
- imaging equipment
- fundamentals of radiation protection
- radiographic technique and principles of radiographic exposure
- darkroom procedures
- interrelationship of the radiographic chain (i.e., technique vs. darkroom procedures);
- adverse contrast reaction
- medical, legal and ethical – minimum four hours
- radiation safety - minimum eight hours; and
- image production and evaluation - film critique - four hours.

Additional courses and clinical competencies to include anatomy, physiology, positioning, pathology, x-ray technique, and proper handling of trauma patients, shall be required for the applicant to qualify for examination in each of the specified limited x-ray procedures. Course length and clinical competencies specified for each limited x-ray procedure are:

- chest - minimum four hours, and passing competencies - ten actual
- extremities - minimum eight hours, and passing upper extremities competencies - five actual and passing lower extremities competencies - five actual
- spine - minimum eight hours, and passing competencies - ten actual
- skull - minimum eight hours, and passing competencies - ten, all of which may be simulated

- abdomen - minimum four hours, and passing competencies - ten actual
- GI tract and associated overhead films - eight hours, and passing competencies - ten, all of which may be simulated; and
- positioning - minimum eight hours and passing competencies - ten actual.

C. Examination Information: ARRT Examination Instructions:

After the application has been processed, you will be sent a letter from this office stating that you are eligible for the ARRT Limited Scope Exam with instructions to you regarding payment of the ARRT examination fee. The examination fee, to be paid directly to ARRT by an applicant. Fees can be found at https://www.arrt.org/docs/default-source/state- licensing/limited-scope-handbook.pdf?sfvrsn=22

1. Once the ARRT processes your fee, **you will be mailed a packet directly from ARRT that includes the appropriate candidate handbook and your candidate status report.**

2. You will be scheduling your examination appointment after you receive the Limited Scope Candidate Status Report from ARRT.

D. Continuing Education Requirements: Six (6) contact hours of continuing education annually which are germane to the radiographic portion of permit holder's profession.