Note: Program requirements, as well as policies, are changed from time to time. New or revised requirements and/or policies become effective when this handbook is revised, and the additions and/or revisions supersede any previous requirement and/or policy in past use, whether in writing or in past practice.
## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELCOME LETTER</td>
<td>6</td>
</tr>
<tr>
<td>PROGRAM MISSION STATEMENT</td>
<td>7</td>
</tr>
<tr>
<td>Missoula College of the University of Montana</td>
<td>8</td>
</tr>
<tr>
<td>Master Plan of Education in Radiologic Technology</td>
<td>8</td>
</tr>
<tr>
<td>CLINICAL EDUCATION SETTINGS</td>
<td>9</td>
</tr>
<tr>
<td>Administrative Structure</td>
<td>10</td>
</tr>
<tr>
<td>RADIOLOGIC TECHNOLOGY PROGRAM</td>
<td>11</td>
</tr>
<tr>
<td>ADMISSION POLICY</td>
<td>12</td>
</tr>
<tr>
<td>FEES AND EXPENSES</td>
<td>13</td>
</tr>
<tr>
<td>RADIOLOGIC TECHNOLOGY PROGRAM CURRICULUM</td>
<td>14</td>
</tr>
<tr>
<td>PROGRAM ORIENTATION</td>
<td>15</td>
</tr>
<tr>
<td>ACADEMIC PHILOSOPHY AND SUPPORT</td>
<td>15</td>
</tr>
<tr>
<td>PROGRESSION REQUIREMENTS</td>
<td>16</td>
</tr>
<tr>
<td>GRADING SYSTEM</td>
<td>16</td>
</tr>
<tr>
<td>GRADUATION REQUIREMENTS</td>
<td>16</td>
</tr>
<tr>
<td>COURSE EVALUATIONS</td>
<td>17</td>
</tr>
<tr>
<td>ADVISORY COMMITTEE</td>
<td>17</td>
</tr>
<tr>
<td>ACADEMIC MISCONDUCT</td>
<td>18</td>
</tr>
<tr>
<td>ADDITIONAL SUPPORT AND RESOURCES</td>
<td>19</td>
</tr>
<tr>
<td>PROBLEMS</td>
<td>19</td>
</tr>
<tr>
<td>STUDENTS WITH DISABILITIES</td>
<td>20</td>
</tr>
<tr>
<td>DESCRIPTION OF THE PROFESSION</td>
<td>21</td>
</tr>
<tr>
<td>WORKING CONDITIONS</td>
<td>21</td>
</tr>
<tr>
<td>EMPLOYMENT OUTLOOK**</td>
<td>23</td>
</tr>
<tr>
<td>CERTIFICATION/LICENSE INFORMATION</td>
<td>24</td>
</tr>
<tr>
<td>QUALIFICATIONS FOR CERTIFICATION</td>
<td>24</td>
</tr>
<tr>
<td>THE AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGISTS</td>
<td>25</td>
</tr>
</tbody>
</table>
TRAINING ................................................................................................................................... 60
COMMUNICABLE DISEASES .................................................................................................. 60
PROFESSIONAL SOCIETIES .................................................................................................... 63
FREQUENTLY ASKED QUESTIONS ....................................................................................... 64
CONFIDENTIALITY STATEMENT FOR ALL CLINICAL SITES ........................................... 67
MEMORANDUM OF AGREEMENT ........................................................................................ 68
WELCOME LETTER

To the Prospective Student, or to the Incoming Radiologic Technologic Student:

We are pleased that you are considering becoming a member of the Radiologic Technology Program at the Missoula College of the University of Montana. If you have already been accepted to the program, then we congratulate and welcome you. We are very proud of the program and the achievements of its graduates.

As a new radiology student (or as you consider becoming one) we hope to assist you in becoming a highly competent radiographer. We use the word “assist” to help you understand that you are responsible for successfully completing the five semester program, as well as passing the American Registry of Radiologic Technology examination.

This Handbook has been written to provide you with program guidelines and helpful information. Since this experience will probably be a very different learning experience than any you have encountered before, we expect that you will become familiar with all College, and University program policies. These policies encompass the professional, clinical and academic behaviors that are to be explicitly followed. It is your responsibility to become knowledgeable of this Handbook contents. You will sign a statement (Memorandum Agreement) verifying that you do understand the contents of the Handbook, and that you do agree to abide by the guidelines set forth within. That form will be retained in your permanent file for the duration of your participation in the program.

As such, this handbook has not been written to replace the Student Code of Conduct, The College Catalog, the Procedures and Policies Manual, or any other official University document. It is to be considered a supplement to those documents. All Radiologic Technology students are subject to the current rules and regulations set forth by the University of Montana and Missoula College, as well as the contents of this handbook.

During your Radiology education, the program faculty will strive to prepare you to become a professional radiologic technologist who is eligible to sit for the national certification examination. However, graduation does not guarantee passage of the exam. This health care career program is one which takes much time and dedication on your part. Realizing this, we would like to wish you all success as you make a commitment to yourselves, and this course of study, for the next two years. Also, let us offer our assistance in helping you make these upcoming years fulfilling ones. We believe that your graduation from the Radiologic Technology Program and your successful career in the field will be the reward for all of your efforts.

Sincerely,

Anne Delaney, MBA, RT (R) Program Director
Dan Funsch, MS, RT (R) Clinical Coordinator
PROGRAM MISSION STATEMENT

The educational mission of the Radiologic Technology Program is to prepare safe, competent and qualified professionals who will enhance the health care of their patients. These entry level professionals will be employed in a variety of hospital and out-patient settings, and will have opportunities to advance in skills that include MRI, CT, and radiation therapy, among others. Radiology students receive scientific and clinical knowledge, skill in applying that knowledge, and an understanding of the human condition on various levels. Respect for, and understanding of diversity and ethics in medical fields is expected in the graduates of the program. The medical field changes so rapidly, lifetime learning is a condition of the profession. Curriculum content is directed by the American Registry of Radiologic Technology (ARRT), which is the certifying body. Curriculum is guided by the American Society of Radiologic Technology (ASRT). The graduates sit for a national certification upon completion of the program.

Goal 1: Demonstrate competency, knowledge, and skills to be successful in the profession.

Goal 2: Express critical thinking skills as they apply knowledge and understanding of scientific principles guiding their practice.

Goal 3: Prove technical competency in all basic radiologic procedures.

Goal 4: Relate culture, ethnicity, socioeconomics, and life experiences to the patients and to their practice.

Goal 5: Respond to ever-changing technology and knowledge in medical care by continuing to seek greater knowledge and skills in the field.

Goal 6: Demonstrate entry-level knowledge in the field by successfully completing the national registry exam to gain the credential of Registered Radiologic Technologist in Radiography (ARRT) (R). The program graduate will practice their profession in an ethical manner and understand the necessity of lifelong learning to be a contributing and productive member of society.
Missoula College of the University of Montana  
Master Plan of Education in Radiologic Technology

Missoula College UM Radiologic Technology Program is an outcome-based program. It is designed to provide the community and the State of Montana with diagnostic imaging professionals who have achieved competency and proficiency in radiologic technology. The goal of the program is that graduates are of the highest caliber. They will contribute to the diagnosis and treatment of disease by providing radiologists with the highest quality images obtainable.

In order to achieve proficiency, the students must master a wide variety of academic and clinical objectives. The students’ cognitive, psychomotor, affective and critical thinking skills are simultaneously developed throughout the five semester program.

Students must progress through a rigorous set of pre-requisite courses, attaining a C or better and an overall GPA of 2.75 to be eligible for applying to the radiology program. Once admitted to the program they must successfully complete a structured system of classroom, laboratory and clinical experience to achieve competency. When the baseline of competency has been achieved, the students remain in the clinical sites performing numerous additional examinations until proficiency is established.

The didactic courses in radiology and anatomy and physiology require that the student achieve a course grade of 80% or higher to remain in the program. Program courses include: Anatomy and Physiology 2, Introduction to Diagnostic Imaging, Radiographic Imaging I, Radiological Methods I, Radiographic Imaging II, Radiobiology/Radiation Protection, Radiological Methods II, Oral Communications, Psychology, and Ethics in Health Professions.

The clinical education component of the curriculum is a structured over four (4) semesters, which include local hospitals and clinical sites. Students are also required to rotate through one or two rural hospitals during the 4 semesters of clinical instruction. Students are supervised by clinical instructors appointed by the institutions and are overseen by the clinical coordinator. The system reinforces and supplements the information presented in the didactic courses. It allows for the gradual development and eventual mastery of the students’ skills.

Students receive introductory didactic courses in patient care, assessment, radiographic anatomy and positioning during the first semester. The radiographic anatomy and positioning course includes intensive laboratory demonstration by faculty and an opportunity to practice all positioning skills necessary to move into the clinical sites. Throughout the 2nd, 4th, and 5th semesters, students are involved in both didactic and clinical courses. During the 3rd semester (summer), students are in clinical instruction 40 hours per week. In this semester, the clinical coordinator rotates among the clinical sites, taking students from the clinical floor to review and test them on their knowledge of image analysis.

Until the students’ are competent on a particular exam they are supervised by the clinical instructor and staff technologists. Once they feel that they are competent in performing a specific examination, they may request that a clinical instructor fill out a Competency Evaluation Form. Students who are signed off on the Competency Evaluation Form are then able to perform the examination with indirect supervision in the future.

Upon successful completion of the five (5) semester curriculum, the students are expected to be competent and proficient in all of the examinations required by the ARRT. Students who have not achieved competency in all examinations may be required to remain in the program until all
such requirements are met. In addition, students will not graduate or be deemed eligible to sit for
the ARRT certification test until all requirements are met.

CLINICAL EDUCATION SETTINGS

Broadway Imaging Center…………………….Site Coordinator, Robbie McGee, RT(R)
2nd Floor-Western Montana Clinic………………………………406-543-7271 x5564
500 West Broadway
Missoula, Montana 59802

Community Medical Center………………Site Coordinator, Jodi Starkel, RT(R)
2827 Fort Missoula Road…………………………………………………..406-327-4334
Missoula, Montana 59804

Curry Health Center……………………Site Coordinator, Adair Kanter, RT(R)
The University of Montana…………………………………………………406-243-2752
634 Eddy Avenue
Missoula, Montana 59801

Marcus Daly Hospital……………………Site Coordinator, Jennifer Shatto, RT(R)
1200 Westwood Drive………………………………………………………406-375-4457
Hamilton, Montana 59840

Missoula Medical Plaza……………………Site Coordinator, Jackie Dayton, RT(R)
900 N. Orange, 1st Floor…………………………………………………….406-327-3415
Missoula, Montana 59802

St. Joseph’s Hospital……………………..Site Coordinator, Terri Carnes
PO Box 1010………………………………………………………………...406-883-8455
Polson, Montana 59869

St. Luke Community Hospital………………Site Coordinator, Steve Sivak, RT(R)
107 6th Avenue SW……………………………………………………….406-676-4441 x 276
Ronan, Montana 59860

St. Patrick Hospital………………………….Site Coordinator, Robbie McGee, RT(R)
500 West Broadway………………………………………………………….406-329-2682
Missoula, Montana 59802
Administrative Structure

President…………………………………………………Royce Engstrom, Ph.D.

Provost……………………………………………………..Perry Brown, Ph.D.

Associate Provost………………………………………Arlene Andrews-Walker, Ph.D.

Dean of the Missoula College…………………………Barry Good, Ph.D.

Associate Dean of the Missoula College……………….Lynn Stocking, M.E.

Faculty Directory

Anne Delaney, MBA, RT(R) ARRT
Program Director
406-243-7809
anne.delaney@umontana.edu

Dan Funsch, MS, RT(R) ARRT
Clinical Coordinator
406-243-7907
dan.funsch@mso.umt.edu

Maryann Robison
Administrative Associate
406-243-7868
maryann.robison@mso.umt.edu
A Radiologic Technologist (Radiographer) uses critical thinking and independent judgment to obtain a diagnostic imaging study while maintaining quality patient care and minimizing radiation exposure. Technologists are employed in acute care settings, ambulatory care settings, physicians’ offices, education, and management or sales positions. With additional education and training, radiographers may be employed in Radiation Therapy, Computed Tomography, Mammography, Magnetic Resonance Imaging, Diagnostic Medical Sonography, Nuclear Medicine, Special Vascular Imaging, and Cardiac Catheterization.

The two year Associate of Applied Science Degree consists of one semester of prerequisite courses in the Associate of Applied Science division, and five semesters of both didactic (classroom) and clinical education. Admission to prerequisite courses is open to all students who are accepted into Missoula College at the University of Montana. Students must pass BIOH 201N, with a final grade of “B” or higher. Students may attempt BIOH 201N a maximum of two times to receive a grade of “B” or better. An overall GPA of 2.75 or greater in all college level courses is necessary to be eligible to apply to the Radiologic Technology Program. Once in the Program, students are expected to complete BIOH 202N, and all other Radiology (AHXR) courses, with a grade of 80% or higher to remain in the program on a continuous basis, and ultimately graduate.

The Radiologic Technology Program is recognized by the American Registry of Radiologic Technologists (ARRT) and accredited by the Northwest Association of Schools and Colleges. When all requirements for the Associate Degree are completed, the student will be eligible to take the national certification examination administered by the American Registry of Radiologic Technologists. Upon successful completion of this examination, the student then becomes a Registered Technologist - RT(R) ARRT. Conviction of a crime (misdemeanor or felony) could leave an individual ineligible for participation in the certifying test. Please contact the ARRT (www.arrt.org) if this is a concern.

Students are required to rotate to various clinics and hospitals in and around the Missoula area. These rotations will begin during the first spring semester and continue for the duration of the program. Rotations may require that students travel as much as one hour away from the Missoula College campus. Clinical affiliates are currently located in Missoula, Hamilton, Ronan, and Polson. Throughout the semesters, clinical schedules vary from 16 hours a week the first semester, to 40 hours a week during the summer session, 24 hours and 27 hours per week each respective semester thereafter. Required attendance hours include morning, afternoon, evening, or night shifts. Additionally, students should be prepared to work any day of the week during their rotations.
ADMISSION POLICY

The Associate of Applied Science and Certificate programs in the Missoula College are designed to lead an individual directly to employment in a specific career. To be eligible for admission, students must have graduated from an accredited high school or passed the GED. Applications for admission are available from the Missoula College by request. An application for admission is complete when the Missoula College has received the credentials described below.

1. Completed and signed application form.

2. A non-refundable application fee payable once at the undergraduate level provided payment is followed by enrollment.

3. For appropriate placement in math and writing courses, all students are required to take either the COMPASS eWRITE, and ALEKS standardized tests and submit scores to the Admissions Office.

4. An official high school transcript with graduation date or GED score report must be sent to the Missoula College.

5. All students are required to submit a completed pre-registration Immunization Form to the Curry Health Center two weeks prior to registration. These forms are sent to students with acceptance notification. After acceptance to the Radiologic Technology Program and prior to beginning clinical rotations, students must show proof of having had a current tuberculosis test PPD or chest x-ray, Hepatitis B vaccine (a three injection series is required), Diphtheria-Tetanus (Tdap), Varicella (Chicken Pox), and a current flu shot. Additionally, CPR training for health care providers will be done before beginning clinicals. Proof of a current health insurance policy is mandatory prior to starting clinicals.

All students interested in participating in the Radiologic Technology Program must first be admitted to the Missoula College as a General Associate of Arts, pre-Radiologic Technology student. Students are then required to successfully complete the prerequisite courses in Associate of Applied Science curriculum, and maintain a cumulative grade point average of 2.75 or better prior to applying to the Radiology Program. Applications become available in the spring of each year. All applications are reviewed by a selection committee and an interview of a selected group of students will be done early to mid-June. Notification of acceptance into the program is announced after final spring semester grades are received; interviews are complete and prior to the fall start of Program curriculum. Radiologic Technology faculty can advise students on the mechanics of the application, but do not recommend any candidates. There is no waiting list. If a student is not accepted into the Program, they have the opportunity to reapply for the next year’s class. Students may apply a maximum of two times to the program.

It is in the best interest of students with intentions of entering the Radiologic Technology Program to seek academic advising from a member of the Radiologic Technology faculty. An appointment can be arranged by contacting Maryann Robison, at 243-7868. The advisor seen initially will continue to be the principal academic advisor for the student while he/she is
attending the Missoula College. The designated faculty advisor must sign all registration and/or drop-add forms and petitions. Program information sessions are held during regularly scheduled Missoula College orientation days and are scheduled throughout the year.

Students will be considered for acceptance into the Program on the basis of having met all the prerequisite curriculum requirements for the Program, grade point average, experience observing/working in the health care area, quality and completeness of their application and if chosen, the face to face interview. Additionally, it is required that three (3) professional references be included in the application packet along with a writing sample in the form of a predetermined essay.

FEES AND EXPENSES

Tuition charges are based on the student’s residence status of the first day of classes for any semester. Please reference the latest schedule of student fees for current tuition information. Fees are subject to change from year to year.

Tuition and fees payment schedule changes on a yearly basis. To find current information regarding fees and tuition please refer to the University of Montana Catalog at: http://www.umt.edu/catalog/eso/expenses/fees.html

Fees related to registration, tuition and other charges are payable in full immediately upon completion of registration, unless prior arrangements have been made with the student Financial Aid office.

Please be aware that participation in the Radiologic Technology Program requires that the student be responsible for purchasing program materials and the traditionally anticipated textbooks/workbooks.

Additional materials/expenses include:

- Two sets of maroon scrubs
- Lead identification markers (at least one set)
- On-line access codes (required for specified classes)
- Positioning handbook
- Program acceptable shoes
- University of Montana shoulder patches (one for each uniform top)
- Criminal Background Check
- Drug and Alcohol Testing
- $5.00 course fee per clinical semester to cover cost of radiation monitoring badge
- $25 course fee Spring semester of the first year for lab supplies
### RADIOLOGIC TECHNOLOGY PROGRAM CURRICULUM

*(Introduction to Computers (CAPP 120): 3cr, or course waived from previous transcript evaluation or proof of competence by taking the required test out exam prior to applying to the program)*

#### Autumn Entry

**Prerequisite Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>M 115</td>
<td>Probability And Linear Math</td>
<td>3</td>
</tr>
<tr>
<td>SCN 175N</td>
<td>Integrated Physical Science</td>
<td>3</td>
</tr>
<tr>
<td>BIOH 201N</td>
<td>Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Introduction To Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

**First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Autumn</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHXR 100</td>
<td>Introduction To Diagnostic Imaging</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AHXR 121</td>
<td>Radiographic Imaging I</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>AHXR 140</td>
<td>Radiographic Methods</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>AHXR 195-1</td>
<td>Radiographic Clinical: I</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>AHXR 240</td>
<td>Radiological Methods II</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>COM 160A</td>
<td>Oral Communications</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>PSYX 161S</td>
<td>Fundamentals Of Organizational Psychology</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>BIOH 202N</td>
<td>Anatomy and Physiology II</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>13</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**Summer**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Autumn</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHXR 195-2</td>
<td>Radiographic Clinical: II</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Autumn</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHMS 270E</td>
<td>Ethics For Health Professions</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>AHXR 195-3</td>
<td>Radiographic Clinical: III</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>AHXR 195-4</td>
<td>Radiographic Clinical: IV</td>
<td>-</td>
<td>9</td>
</tr>
<tr>
<td>AHXR 221</td>
<td>Radiographic Imaging II</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>AHXR 225</td>
<td>Radiobiology/Radiation Protection</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>AHXR 270</td>
<td>Radiographic Registry Review</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>13</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

**Total Program Credits** 83
PROGRAM ORIENTATION

During the first semester of the Program, students will be introduced to the Radiologic Technology program. This will include information on the use of radiation monitoring badges, departmental policies, clinical policies, medical ethics, interpersonal relationships, and professional societies.

A course syllabus will be distributed for each course which will provide the student with the following information:

- course overview
- presentation methods
- required texts
- classroom procedures
- grading policy
- general course objectives
- class schedule outline

It is the responsibility of each student to be fully aware of the contents of the syllabus and the consequences which exist if the student deviates from any policy regarding classroom conduct.

ACADEMIC PHILOSOPHY AND SUPPORT

Students are responsible for the timely completion of all assignments, keeping current with reading from texts, preparing for classes and completing online assignments by their due date. Students are encouraged to form study groups and make use of all classroom and college references. Instructors have an open door policy for individual tutoring and are accessible to students before and after class, as well as during faculty office hours. Students may also call or e-mail faculty with questions. Online communicating with students regarding assignments, grades, and learning modules are frequently used. For those students who do not have internet accessibility at home, the college has wireless support in both buildings. There is also a Computer Center where students can gain access to the internet to work on and print assignments. It is the student’s responsibility to seek timely assistance in content areas that are challenging them.

The Program’s philosophy recognizes the importance of grading as a method of assessing content knowledge. However, understanding corrections from assessment methods is much more significant. The program does not promote memorization as a method of understanding, but challenges students to use higher level learning skills such as analysis, contrast and comparison, and critical thinking.
PROGRESSION REQUIREMENTS

Prerequisite Courses
The curriculum is dependent upon proper sequencing of courses. The A.A. prerequisite courses (non-radiologic technology) must be in progress or completed prior to applying to the Radiologic Technology Program.

Program General Education Courses
The general education courses, which are Program requirements and not prerequisite requirements, may be completed prior to the application process or (if accepted) at any time during the Program, but must be completed before the end of the program. BIOH 202N must be completed with a grade of “B” or better for the student to remain in the program. Admissions to the A.A. prerequisite courses are open to all students who are accepted into The University of Montana and the Missoula College, and may be taken in any order.

Program Specific Courses
Radiology courses can only be taken once accepted into the Program and must be completed in the sequence described in the most current catalog. It is the responsibility of the student to meet all prerequisites. The student is to meet with an advisor to plan his/her course of study each semester. If a student does not satisfactorily meet the course objectives and pass the Radiological Technology courses, he/she will be unable to progress in the curriculum, and therefore, will be dismissed from the Program, or fail to graduate.

GRADING SYSTEM
Radiography is a profession in which less than adequate performance may cause patients to suffer harm; therefore, high Program standards must be maintained to insure the effectiveness and competency of graduates. The number and letter grading system for each radiology class and clinical educational experience will be specified in respective course syllabi.

GRADUATION REQUIREMENTS
Students may graduate by fulfilling University and Departmental requirements in any University of Montana catalog under which he/she has been enrolled during the six years prior to graduation. University or Departmental changes, however, may take place in order to comply with accreditation requirements, certification and licensing requirements, or other like circumstances. To become a candidate for a degree, the student must file a formal application with the Missoula College Registrar’s office at the beginning of the semester in which he/she expects to graduate.

Students must have also fulfilled all requirements specific to the Radiologic Technology Program. This includes having maintained a grade point average of at least 2.75, completed all radiology courses with a grade of “B” or higher, completed all required hours in clinicals, and be proven competent of the expectations set forth by the American Registry of Radiologic Technology.
A student is eligible for graduation from a radiologic technology program if they are able to:

- Use oral and written communication;
- Demonstrate knowledge of human structure, function and pathology;
- Anticipate and provide basic patient care and comfort measures;
- Apply principles of body mechanics;
- Perform basic mathematic functions;
- Operate radiographic imaging equipment and accessory devices;
- Position the patient and imaging system to perform radiographic examinations and procedures;
- Modify standard procedures to accommodate patient’s condition and other variables;
- Process images;
- Determine exposure factors to obtain diagnostic quality images following the principles of ALARA;
- Adapt exposure factors for various patient conditions, equipment, accessories, and contrast media to maintain appropriate radiographic quality;
- Practice radiation protection for the patient, self, and others;
- Recognize emergency patient conditions and initiate applicable treatment including basic life-support procedures;
- Evaluate radiographic images for appropriate positioning and image quality;
- Evaluate the performance of radiographic systems, know the safe limits of equipment operation, and report malfunctions to the proper authorities;
- Demonstrate knowledge and skills relating to quality assurance;
- Exercise independent judgment and discretion in the technical performance of medical imaging procedures.

**COURSE EVALUATIONS**

Once a semester, all students are requested to complete course evaluations for each class in which they are enrolled. Students are invited to use constructive criticism in completing the evaluations so faculty can identify strengths and weaknesses in the course. Faculty does not review the actual evaluations by the students, but receive a summary or an average of the course ratings.

**ADVISORY COMMITTEE**

The Advisory Committee will function in an advisory capacity to program administrators. The committee will make recommendations related to any of the following departmental goals:

- Insuring an educational atmosphere that will produce radiologic technologists proficient in all aspects of radiologic technology.
- Developing a working and supportive relationship with local and state radiologic technology societies and hospital affiliates.
- Identifying strengths and weaknesses of the existing program, and planning and developing methods through which weaknesses can be alleviated.
- Acting as an initiator rather than a reactor in relation to change.
- Being sensitive and responsive to national and state trends.

The membership composition includes: the medical director, chief technologist and/or clinical faculty from each hospital affiliate, Dean and Associate Dean of The Missoula College, the chairperson of the Health Professions Department, Program Director of the Radiologic Technology Program, the Clinical Coordinator, and one student from the Program.

At least one regular meeting will be scheduled during each academic year. Other meetings may be scheduled when a need is indicated. Student members shall be selected by the Program Director to serve a term of two years. In the event of any membership vacancies, replacements will be appointed to serve the remainder of the term.

**ACADEMIC MISCONDUCT**

Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. Academic misconduct is defined as all forms of academic dishonesty, including but not limited to:

1. **Plagiarism:** Representing another person's words, ideas, data, or materials as one's own.

2. **Misconduct during an examination or academic exercise:** Copying from another student's paper, consulting unauthorized material, giving information to another student or collaborating with one or more students without authorization, or otherwise failing to abide by the University or instructor's rules governing the examination or academic exercise without the instructor's permission.

3. **Unauthorized possession of examination or other course materials:** Acquiring or possessing an examination or other course materials without authorization by the instructor.

4. **Tampering with course materials:** Destroying, hiding, or otherwise tampering with source materials, library materials, laboratory materials, computer system equipment or programs, or other course materials.

5. **Submitting false information:** Knowingly submitting false, altered, or invented information, data, quotations, citations, or documentation in connection with an academic exercise.

6. **Submitting work previously presented in another course:** Knowingly making such submission in violation of stated course requirements.

7. **Improperly influencing conduct:** Acting calculatedly to influence an instructor to assign a grade other than that actually earned.

Therefore, any student found to have participated in academic misconduct will be subject to the process as described in the Student Code of Conduct, located in The University of Montana catalog, and which can also be accessed at:

ADDITIONAL SUPPORT AND RESOURCES

The University of Montana offers many services to help students who are experiencing academic difficulty. Faculty academic advisors are a primary source for such students as they are in a position to give advice and make appropriate referrals. Several courses are taught to assist students who have deficiencies in their academic backgrounds. Help with study skills are available in the AASC 100 Introduction to The University Experience course. Financial needs, personal problems, and indecision regarding vocation often affect academic performance. The Financial Aid Office, the Counseling Center, the Curry Health Center, the Career Planning and Placement Service, and the Clinical Psychology Center can help in these areas. The Academic Support Center (ASC) offers a variety of services designed to increase the Missoula College students’ academic success. Students are assisted in the development of speed-reading, study skills, and tutoring in various subject areas. Academic coaching and career counseling, as well as assistance in the transition from workplace to school is available within Student Services and/or Retention services.

PROBLEMS

We realize that problems may occur during the program duration. We can help you solve these problems only if we are made aware of them. Any problems incurred in the clinical areas should first be brought to the attention of the site coordinator and the Clinical Coordinator. Any problems dealing with the program as a whole; whether they deal with your classes at the MC, or problems that cannot be answered to your satisfaction by the site coordinator or the Clinical Coordinator, should be referred to the Program Director. Problems may be documented so that issues can be followed-up through a complete process to resolution.
STUDENTS WITH DISABILITIES

"The dignity of the human being is inviolable."
_The Montana Constitution, Article 2, Section 4 adopted 1972_
Disability Services for Students is in The University of Montana's student affairs office which assures program access to the University by students with disabilities. We coordinate and provide reasonable accommodations, advocate for an accessible and hospitable learning environment, and promote self-determination on the part of the students we serve. Visit Diversity at UM

Important Test Scheduling Notice!

As of Autumn Semester 2010, Disability Services requires one week's notice for scheduling exams with modifications in our testing rooms. This is a change from the previous 2-day requirement, with the purpose of assisting us to better manage our testing resources and therefore, ensuring adequate accessible testing facilities for students with disabilities. If you have questions, please feel free to contact your Disability Services Coordinator or you can link to our test modification policies.
DESCRIPTION OF THE PROFESSION

A Radiologic Technologist (Radiographer) uses critical thinking and independent judgment to obtain a diagnostic imaging study while maintaining quality patient care and minimizing radiation exposure. Radiologic Technologists take x-ray images (radiographs) of parts of the human body for diagnosing medical problems. They prepare patients for radiographic examinations by explaining the procedure, removing articles of jewelry through which x-rays cannot pass, and position patients so the parts of the body can be appropriately radiographed. To prevent unnecessary exposure to radiation, these workers surround the exposed area with radiation protection devices, such as lead shields, or by limiting the size of the x-ray beam. Radiographers position radiographic equipment at the correct height and angle over the appropriate area of the patient’s body. Technologists set controls on the x-ray machine to produce radiographs of the appropriate density, detail and contrast. They place image receptors (IR) under the part of the body being examined and make the exposure. Then they remove the IR and process it either by developing the film, or using a computerized acquisition system. Technologists analyze the images. They consult with doctors about improving or changing the image if necessary.

Radiologic Technologists must follow physician’s orders precisely and conform to the regulations concerning the use of radiation to protect themselves, their patients and their coworkers from unnecessary radiation exposure. Technologists may keep patient records, prepare work schedules, evaluate purchases of equipment, or manage a radiology department. Additional responsibilities include the ongoing monitoring of equipment safety and quality. This requires a level of professional judgment which necessitates quality academic and clinical training.

WORKING CONDITIONS

Most full-time radiologic technologists work approximately 40 hours a week. They may, however, have evening, weekend or on-call hours. Opportunities for part-time and shift work is also available.

The Radiographic Technologist is able to:

- apply knowledge of anatomy, physiology, positioning, and radiographic techniques to accurately demonstrate anatomical structures on a radiograph or imaging receptor
- determine exposure factors to achieve optimum radiographic techniques with minimum radiation exposure to the patient
- evaluate radiographic images for appropriate positioning and image quality
- apply the principles of radiation protection to the patient, self, and others
- provide patient care and comfort
- recognize emergency patient conditions and initiate lifesaving first aid and basic life-support procedures
- evaluate the performance of radiologic systems, know the safe limits of equipment operations, and report malfunctions to the proper authorities
- exercise independent judgment and discretion in the technical performance of medical imaging procedures
- participate in radiologic quality assurance programs
- provide patient/public education related to radiologic procedures and radiation protection safety
- utilize physical strengths and capabilities by: assisting and lifting patients onto and from radiographic tables; carrying various accessory equipment; and manipulating radiographic equipment
- demonstrate expected ethical and professional behavior
- communicate and interact effectively with patients, the members of the healthcare profession, and others

Physical stamina is important in this occupation because technologists are on their feet for long periods and may lift or turn disabled patients. Technologists work at diagnostic machines but also may perform some procedures at patients' bedsides.

Technologists and students must be able to perform the following tasks that include numerous physical and mental skills. Students are continuously in contact with patients who need physical assistance. Therefore, students must be able to:

1. Hear faint sounds from a distance of 15 ft.
2. Far vision correctable in one eye to 20/20 and 20/40 in the other eye
3. Lift 20 pounds from the floor, carry 10 ft and place on a surface 36 inches high
4. Frequent lifting and carry up to 50 lbs.
5. Push/pull 1 to 20 lbs force continuously, 20 to 50 lbs force occasionally, 50 to 75 lbs force rarely
6. Work with arms overhead for 15 to 20 minutes at a time
7. Safely and successfully manipulate and transport mobile radiographic equipment
8. Endure observing and working, hands-on, with severely injured trauma patients or critically ill patients.
9. Assist with radiography of a corpse
10. Communicate effectively with patients and staff.

Technologists are employed in acute care settings, ambulatory care settings, physicians’ offices, in education, and in management or sales positions. With additional education, training and testing, radiographers may be employed in Radiation Therapy, Computed Tomography, Mammography, Magnetic Resonance Imaging, Diagnostic Medical Sonography, Nuclear Medicine, Special Vascular Imaging, and Cardiac Catheterization.
EMPLOYMENT OUTLOOK**

According to the Bureau of Labor and Statistics, employment is projected to grow faster than average. Those with knowledge of more than one diagnostic imaging procedure – such as CT, MR, and mammography – will have the best employment opportunities. Radiologic technologists held about 214,700 jobs in 2008. About 61 percent of all jobs were in hospitals. Most other jobs were in offices of physicians; medical and diagnostic laboratories, including diagnostic imaging centers; and outpatient care centers.

Employment of radiologic technologists is expected to increase by about 17 percent from 2008 to 2018, faster than the average for all occupations. As the population grows and ages, there will be an increasing demand for diagnostic imaging. With age comes increased incidence of illness and injury, which often requires diagnostic imaging for diagnosis. In addition to diagnosis, diagnostic imaging is used to monitor the progress of disease treatment. With the increasing success of medical technologies in treating disease, diagnostic imaging will increasingly be needed to monitor progress of treatment.

Wages and Benefits

- In Montana, the median wage for radiologic technologists is $48,200 per year ($23.91 per hour).
- Nationally, the median wage for radiologic technologists is $52.200 per year ($25.10 per hour).
- Wages vary by the technologist’s specialty and level of experience.

Full-time radiographers usually receive benefits. Common benefits include sick leave, paid vacation, health insurance and workers compensation insurance. Part-time technologists may not receive some benefits. Occasionally facilities may offer new employees incentives such as sign-on bonuses, relocation expenses reimbursement, and financial assistance with previous student loans.

** Taken from the Bureau of Labor Statistics, Occupation Outlook Handbook, 2010-2011
CERTIFICATION/LICENSE INFORMATION

The American Registry of Radiologic Technologists (ARRT) uses “certification” to describe the one-time awarding of a certificate after an individual satisfies all eligibility requirements including the certification exam. “Registration” is the annual renewal of the certificate’s validity.

“Licensing” is most commonly used to refer to State laws. The State, not the ARRT, is the authority that administers the license and grants an individual permission to practice radiologic technology within that state. Application for and renewal of a State license is separate from the ARRT certification process and varies from state to state.

Although the ARRT examination is a voluntary certification exam, many states use the scores in licensing decisions. Approximately two-thirds of the states (Montana included) have licensing laws covering the practice of radiologic technology.

In Montana, licenses expire on February 1 of each year and may be renewed upon payment of a fee.

As a student of the Missoula College of the University of Montana Radiologic Technology Program, you will be recommended for the ARRT Registry exam, providing you have met all requirements. Application books, with detailed directions on how to make arrangements to take the exam, will be distributed during your last semester.

QUALIFICATIONS FOR CERTIFICATION

In accordance with the American Registry of Radiologic Technologist’s “Equation for Excellence”, candidates for ARRT certification must meet basic requirements in three (3) components of the equation: 1) ethics, 2) education, and 3) examination.

Ethics

Every candidate for certification and every applicant for renewal of registration must, according to the governing documents, “be a person of good moral character and must not have engaged in conduct that is inconsistent with ARRT Rules of Ethics, and they must “agree to comply with the ARRT Rules and Regulations and the ARRT standards of Ethics.”

ARRT investigates all potential violations in order to determine eligibility. One issue addressed by the Rules of Ethics is the conviction of a crime, including a felony, a gross misdemeanor or a misdemeanor, with the sole exception of speeding and parking violations. All alcohol and/or drug related violations must be reported except in cases of an MIP prior to the age of 18.

Education

Eligibility for certification also specifies the satisfaction of educational preparation requirements. For the primary categories eligibility requires the successful completion of the respective discipline’s formal educational program that is accredited by a mechanism acceptable to the ARRT. Candidates must also demonstrate competency in didactic coursework and an ARRT-specified list of clinical procedures.

Examination

Finally, eligibility requires candidates for certification, after having met all other qualifications, to pass an examination developed and administered by the ARRT. The exams assess the knowledge and cognitive skills underlying the intelligent performance of the tasks typically
required of staff technologists practicing within the respective disciplines. Exam content is specified on the ARRT website and in the respective handbook for each discipline.

THE AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGISTS
PRINCIPLES OF PROFESSIONAL CONDUCT / CODE OF ETHICS

This Code shall serve as a guide for Radiologic Technologists to evaluate their professional conduct as it relates to patients, colleagues, other members of the healthcare team, healthcare consumers, and employers. The Code is intended to assist radiologic technologists in maintaining a high level of ethical conduct. The entire Standards of Ethics can be found at: https://www.arrt.org/pdfs/Governing-Documents/Standards-of-Ethics.pdf

10 Principles of Professional Conduct

1. The Radiologic Technologist conducts himself/herself in a professional manner, responds to patient needs and supports colleagues and associates in providing quality patient care.

2. The Radiologic Technologist acts to advance the principal objective of the profession to provide services to humanity with full respect for the dignity to mankind.

3. The Radiologic Technologist delivers patient care and service unrestricted by the concerns of personal attributes or the nature of the disease or illness, and without discrimination regardless of sex, race, creed, religion, or socioeconomic status.

4. The Radiologic Technologist practices technology founded upon theoretical knowledge and concepts, utilizes equipment and accessories consistent with the purposes for which they have been designed, and employs procedures and techniques appropriately.

5. The Radiologic Technologist assesses situations, exercises care, discretion and judgment, assumes responsibility for professional decisions, and acts in the best interest of the patient.

6. The Radiologic Technologist acts as an agent through observation and communication to obtain pertinent information from the physician to aid in the diagnosis and treatment management of the patient, and recognizes that interpretation and diagnosis are outside the scope of practice for the profession.

7. The Radiologic Technologist utilizes equipment and accessories, employs techniques and procedures, performs services in accordance with an accepted standard of practice, demonstrates expertise in limiting the radiation exposure to the patient, self and other members of the members of the healthcare team.

8. The Radiologic Technologist practices ethical conduct appropriate to the profession, and protects the patient’s right to quality radiologic technology care.
9. The Radiologic Technologist respects confidences entrusted in the course of professional practice, respects the patient’s right to privacy, and reveals confidential information only as required by law or to protect the welfare of the individual or the community.

10. The Radiologic Technologist continually strives to improve knowledge and skills by participating in educational and professional activities, sharing knowledge with colleagues and investigating new and innovative aspects of professional practice. One means available to improve knowledge and skills is through professional continuing education.

**Honor Code Violations**

Have you ever been suspended, dismissed, or expelled from an educational program that you have attended in order to meet ARRT certification requirements?

This is a question every primary-pathway candidate for certification must answer on the application, in addition to reading and signing the "Written Consent under FERPA," which allows ARRT to obtain specific parts of their educational records concerning violations to an honor code. If a student has ever been suspended, dismissed, or expelled from an educational program attended in order to meet ARRT certification requirements, he or she should answer "Yes" to the question above and include an explanation and documentation of the situation with the completed application for certification.

A list of some of the violations ARRT is concerned about is provided below, but when in doubt, contact the ARRT Ethics Requirements Department at (651) 687-0048, ext. 8580.

**Reportable Honor Code Violations**

Note: this list does not include all reportable infractions. If you are unsure of whether something should be reported, contact a member of the Ethics staff at (651) 687-0048, ext. 8580.

- Cheating and/or plagiarism;
- Falsification of eligibility requirements (e.g., clinical competency information);
- Forgery or alteration of any document related to qualifications or patient care;
- Abuse, neglect, or abandonment of patients;
- Sexual contact without consent or harassment to any member of the community, including patients;
- Conduct that is seriously obscene or offensive;
- Practicing in an unsafe manner or outside the scope of professional training;
- Violating patient confidentiality (HIPAA);
- Attempted or actual theft of any item not belonging to the student (including patients’ property); and/or
- Attending class or clinical setting while under the influence of alcohol, drugs, or other substances.

**Notice**
Applicants should be aware that the American Registry of Radiologic Technologists (ARRT) is the nationally recognized organization which provides voluntary certification exams and registration status information for radiographers. As such, the ARRT Code of Ethics has strict requirements for individuals who have a criminal background or a history of military court-martial. Applicants with such a history are strongly advised to contact the ARRT and go through the pre-application process to determine future eligibility status before enrolling in the radiography program. Further information can be found at the ARRT website: [www.arrt.org](http://www.arrt.org) or by calling the ARRT at (651) 687-0048. **Decisions on ARRT applicant eligibility based on criminal background are solely the responsibility of the ARRT.**
THE CLINICAL EDUCATION

The clinical education, which begins the first spring semester of the program, will be much different than the traditional classroom instruction to which the student has become accustomed. It involves the radiography and care of real patients, and the use of radiation, which could be dangerous to humans if used improperly. Since many factors together constitute a very different situation than a classroom education, a much more structured set of rules and regulations are necessary to ensure the smooth functioning and effectiveness of the clinical courses.

The Missoula College has a written agreement for clinical education with affiliated hospitals and clinics. A close cooperation between The College and the Site Instructor is vital to the continued success of the Radiologic Technology Program. Our agreement with the affiliated hospitals and clinics states:

Hospital reserves the right to terminate the continuation of any student who is not complying with applicable Hospital policies, procedures or directions from Hospital personnel or physicians involved in the clinical education program or who is deemed by Hospital not to have adequate qualifications or ability to continue in the program, or the health of the student does not warrant a continuation at Hospital, or whose conduct interferes with the proper operation of Hospital.

Students who for any reason do not complete the program’s mandatory clinical training, including those who are unable to obtain or remain in an acceptable clinical training site, will not be eligible for graduation or licensure. Any student who has been terminated from a clinical setting by the clinical institution may be subject to an immediate recommended dismissal from the program.

The students’ part in ensuring the effectiveness of the clinical portion of the Program is to have a good understanding of the “hands on” clinical training, a thorough knowledge of the rules, and the will to cooperate with them.

The physical and emotional welfare of patients and their families carries the highest priority. A student who demonstrates clinically unsafe practice which jeopardizes the physical or emotional welfare of patients or their families may be relieved from clinical responsibilities. The student may also be referred to the appropriate resources for evaluation and/or assistance. The faculty will identify and document unsafe behavior, as well as, counsel the student. A written evaluation will be provided to the Program Director. In the event that a student is removed from clinical responsibilities and deemed ineligible to return, the student will be recommended for dismissal from the program.

The importance of the clinical experience is invaluable. Even when there are no radiographic examinations to be performed, students are encouraged to practice positioning skills or equipment manipulation in exam rooms with the permission of the Site Instructor or immediate technologist in charge. Students are not to read magazines, newspapers, or do puzzles of any type during slower work times. Any student found doing so will be given a verbal warning, and documentation of such will be placed in his/her file.
All patient and hospital records are confidential. Students are expected to maintain the confidentiality in accordance with the HIPAA Privacy Rule. Information learned throughout the clinical work day remains private and at the facility. The HIPAA Privacy Rule provides federal protections for personal health information held by covered entities and gives patients an array of rights with respect to that information. At the same time, the Privacy Rule is balanced so that it permits the disclosure of personal health information needed for patient care and other important purposes.
BACKGROUND CHECKS/ DRUG AND ALCOHOL TESTING

Our affiliate agreements require that students provide background checks by stating:

School agrees to request a criminal background check pursuant to applicable “Child and Adult Abuse Laws.” School agrees to require that students provide Hospital with a copy of the criminal background check results. School acknowledges that placement of each student at Hospital is contingent upon provision of the criminal background check results dated less than two years prior to the commencement of the clinical education program placement.

Students may use any background checking company that does both Federal and State criminal background checking. There is a link on the Missoula College Health Professions website that can be used. Students are responsible to pay for the background check and to make copies of the results for each institution. [http://www.cte.umt.edu/health](http://www.cte.umt.edu/health). Students must attach a copy of their background check to the clinical orientation paperwork to be submitted to the Institution’s Human Resources Department. Students may make copies for each institution.

At this time none of our affiliate institutions require Drug and Alcohol testing.

RADIOLOGIC TECHNOLOGY CLINICAL COMPETENCY SYSTEM

As required by the ARRT, this Program utilizes a competency based method of clinical education. The following section will explain this system and provide the clinical objectives which are used to determine clinical grades.

Cognitive, Psychomotor, and Affective Skills

It is commonly acknowledged that the cognitive (classroom), psychomotor (clinical), and affective (values) aspects of curriculum occur simultaneously and are integrated. To assure meaningful clinical participation, the student should have mastered those cognitive competencies necessary to assure a clinical participation aspect of the program. Those cognitive competencies normally include: Radiographic Procedures, Anatomy and Physiology, and Radiographic Imaging and Protection.

The student begins his/her clinical participation by first observing a practicing Radiologic Technologist in the execution of duties. This participation moves from a passive mode of observation to a more active mode of assisting the Radiologic Technologist with radiographic exams. The rate of student progress is dependent upon the ability of the student to comprehend and perform the various tasks assigned to them. As the student gains experience in various procedures, he/she gradually moves into an independent clinical performance stage. At this point, the student is actually performing the procedure under the direct supervision of a Radiologic Technologist.

Category Competency Evaluation

When the student feels they are performing a procedure(s) at an acceptable level, he/she may request a category competency examination. Upon successful completion of an exam, the
student’s Competency form must be documented with the initials of a registered Radiographic Technologist, (who has been practicing for more than one year) and the date the exam was completed. This must be repeated three (3) times for the same procedure to prove final competency. Once final competency is achieved, a student may begin working under indirect supervision. If a student fails one or more of the requirements of the exam, he/she shall return to that area of weakness and obtain additional experience. After this additional experience is gained, the student can be re-evaluated. This approach provides the student the opportunity to progress at an individual rate consistent with his/her abilities, knowledge, and motivation.

The Clinical Experience

The clinical education experience is meant to provide the student with a well-rounded experience in all aspects of routine radiography. Students are not encouraged to attempt imaging exams alone with which they are not familiar. Also, students are not expected to replace a technologist or perform examinations without technologists available in the department or institution. All images obtained by a student must be cleared by a technologist and that technologist’s initials should appear on the order. All exams that have to be repeated a second time must be performed with a technologist in the exam room.

- When a student believes that they have adequate experience in performing a certain procedure, they must ask a qualified radiologic technologist to observe and grade their performance on that specific procedure.
- The selected technologist will directly supervise the student during the entire procedure.
- Upon completion, the student and the supervising technologist will complete the Competency Evaluation form. The student must receive a “YES” in all categories in order to pass the Competency. PASS or NO PASS should be checked to indicate the outcome of this particular exam.

At the end of each rotation, an evaluation of a student’s performance will be completed by the Site Coordinator with input from the technologist(s) who worked most closely with the student. Students will be counseled as to the results of these evaluations, so that areas of interest can be highlighted, and the evaluations will be added to the student’s file. The total score from all evaluations completed during a semester will be averaged and added to the equation used to determine the clinical grade. The evaluation is based on the following objectives.

The areas to be evaluated are:

1. read and evaluate a requisition sufficiently
2. prepare and keep the immediate and surrounding areas adequately stocked, ready, and clean
3. exhibit qualities deemed appropriate for good patient care, including a courteous and attentive manner, with a concern for a patient’s comfort, modesty, and safety
4. demonstrate expertise in using optimal radiation protection methods to produce maximum quality radiographs while minimizing exposure to self, patient, and others
5. manipulate with proficiency, the various types of equipment used within the radiology department and by technologists in other areas of the healthcare facility, in order to accomplish daily tasks or to administer proper and/or emergency patient care

6. use the proper patient positioning skills in order to obtain optimum images for diagnostic studies

7. work independently, assuming responsibility for exams and the care of a patient, as well as be a team player, willing to interact with other members of the healthcare profession with a positive and cooperative attitude

8. show enthusiasm, initiative, and motivation by seeking additional responsibilities and utilizing extra time with meaningful learning experiences, putting forth effort to be involved in work and displaying considerable interest in the field by asking questions and assuming additional tasks without having to be told

9. demonstrate the qualities and ethical conduct as described in the American Registry of Radiologic Technologist Code of Ethics; reacting well to stressful situations and displaying behavior becoming to a health care professional

10. be in attendance and be punctual in the clinical environment at all designated times, assuming all responsibility for communicating any absence from assigned areas and following instructions efficiently

11. to develop thoughts in logical, coherent sequence, comprehending ideas and expressing thoughts in a well-defined manner, while demonstrating a keen grasp of complex ideas

12. demonstrate self-esteem and respect for the profession by always conforming to the established dress code as published in the Student Handbook, ensuring that attire, physical appearance and personal hygiene exhibit good grooming and cleanliness at all times
IDENTIFICATION MARKERS

Students will use their own initialed RIGHT and LEFT markers to properly identify patient anatomy. These markers are to be used during labs and at the clinical facilities.

Under no circumstances will a student lend their marker to anyone, or borrow anyone else’s marker. If a student loses a marker, it is their responsibility to purchase a new one. Faculty will place the first order for new students (students assume payment responsibility) but additional orders are the responsibility of the student.

TLD (FILM) BADGES

All students will be provided thermo luminescent dosimetry (TLD) badges at the start of their clinical rotations. These radiation monitoring devices are considered to be part of the daily uniform, and are to be worn at all times while in clinicals. Any student who loses or misplaces their TLD badge cannot be on the clinical floor until the badge has been found or replaced. Personal radiation protection is a very serious matter. Care of the monitoring badge is the responsibility of the student. Any damage or loss of the badge must be reported to the Clinical Coordinator immediately. Any deviation from program policies or other appropriate policies regarding radiation monitoring may result in disciplinary action.

Radiation reports will be generated from the monthly submission of TLD badges. The reports can be reviewed by individual students in consultation with program faculty. Radiation reports can no longer be posted and must remain anonymous. A student should review his/her report regularly. Each student must exchange his/her badge according to program schedule. Failure to observe this schedule will result in disciplinary action, additional assessments, and/or late fees charged by the company.

VENIPUNCTURE

Students in the professional curriculum may fill syringes with contrast medium designated for an examination. The examinations are limited to IVUs, venograms, sialograms, hysterosalpingograms, bronchograms, and lymphangiograms. Preparation of ready IV contrast medium may be set up for injection with appropriate IV tubing and needles. Any additions of medication into IV flushing solutions are prohibited by the student, unless during Radiographic Clinical Education IV. At some facilities, students may be allowed to administer contrast medium with direct supervision following formal education in intravenous injections.
ARRT Competency Requirements

Radiography
Didactic and Clinical
Competency Requirements

Eligibility Requirements Effective January 2012*

Candidates for certification are required to meet the Professional Requirements specified in Article II of the ARRT Rules and Regulations. This document identifies the minimum didactic and clinical competency requirements for certification referenced in the Rules and Regulations. Candidates who complete a formal educational program accredited by a mechanism acceptable to the ARRT will have obtained education and experience beyond the requirements specified here.

Didactic Requirements
Candidates must successfully complete coursework addressing the topics listed in the ARRT Content Specifications for the Examination in Radiography. These topics are presented in a format suitable for instructional planning in the ARRT Radiography Curriculum (2007).

Clinical Requirements
As part of their educational program, candidates must demonstrate competence in the clinical activities identified in this document. Demonstration of clinical competence means that the program director or designee has observed the candidate performing the procedure, and that the candidate performed the procedure independently, consistently, and effectively. Candidates must demonstrate competence in the areas listed below.

- Six mandatory general patient care activities.
- Thirty-one mandatory imaging procedures.
- Fifteen elective imaging procedures to be selected from a list of 35 procedures.
- One elective imaging procedure from the head section.
- Two elective imaging procedures from the fluoroscopy studies section, one of which must be either an Upper GI or a Barium Enema.

Documentation
The following pages identify specific clinical competency requirements. Candidates may wish to use these pages, or their equivalent, to record completion of the requirements. The pages do not need to be sent to the ARRT.

To document that the didactic and clinical requirements have been satisfied, candidates must have the program director (and authorized faculty member if required) sign the ENDORSEMENT SECTION of the Application for Certification included in the Certification Handbook.

* Note: Candidates who complete their educational program during 2012 or 2013 may use either the previous requirements (effective 2005) or the current requirements (effective 2012). Candidates who graduate after December 31, 2013 may no longer use the previous competency requirements.

Copyright © 2010 by The American Registry of Radiologic Technologists®. All rights reserved.
Radiography
Clinical Competency Requirements

The clinical competency requirements include the six general patient care activities listed below and a subset of the 66 imaging procedures identified on subsequent pages. Demonstration of competence should include variations in patient characteristics (e.g., age, gender, medical condition).

1. General Patient Care

Requirement: Candidates must demonstrate competence in all six patient care activities listed below. The activities should be performed on patients; however, simulation is acceptable (see footnote) if state or institutional regulations prohibit candidates from performing the procedures on patients.

<table>
<thead>
<tr>
<th>General Patient Care</th>
<th>Date Completed</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CPR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Vital signs (blood pressure, pulse, respiration)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Sterile and aseptic technique</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Venipuncture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Transfer of patient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Care of patient medical equipment (e.g., oxygen tank, IV tubing)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The ARRT requirements specify that certain clinical procedures may be simulated. Simulations must meet the following criteria: (a) the student is required to competently demonstrate skills as similar as circumstances permit to the cognitive, psychomotor, and affective skills required in the clinical setting; (b) the program director is confident that the skills required to competently perform the simulated task will generalize or transfer to the clinical setting, and, if applicable, the student will evaluate related images. Examples of acceptable simulation include: demonstrating CPR on a mannequin, positioning a fellow student for a projection without actually activating the x-ray beam, and performing venipuncture by demonstrating aseptic technique on another person, but then inserting the needle into an artificial forearm or grapefruit.
## Radiography

### Clinical Competency Requirements (cont.)

<table>
<thead>
<tr>
<th>Imaging Procedure</th>
<th>Mandatory or Elective</th>
<th>Date Completed</th>
<th>Patient or Simulated</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Extremity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Toe</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Foot</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Ankle</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Knee</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Tibia Fibula</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Femur</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Trauma Lower Extremity*</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Patella</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Calcaneus (Os Calcis)</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Head – Candidates must select at least one elective procedure from this section.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Skull</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Paranasal Sinuses</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Facial Bones</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. Orbit</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. Zygomatic Archess</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. Nasal Bones</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. Mandible</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spine and Pelvis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. Cervical Spine</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. Trauma Cervical Spine (Cross Table Lateral)*</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. Thoracic Spine</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. Lumbar Spine</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. Pelvis</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. Hip</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41. Cross Table Lateral Hip</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42. Sacrum and or Coccyx</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43. Scapulae Series</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44. Sacroiliac Joints</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Abdomen</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45. Abdomen Supine (KUB)</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46. Abdomen Upright</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47. Abdomen Decubitus</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48. Intravenous Urography</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Trauma is considered a serious injury or shock to the body. Modifications may include variations in positioning, minimal movement of the body part, etc.*
<table>
<thead>
<tr>
<th>Imaging Procedure</th>
<th>Mandatory or Elective</th>
<th>Date Completed</th>
<th>Patient or Simulated</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoroscopy Studies – Candidates must select either Upper GI or Barium Enema plus one other elective procedure from this section.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49. Upper GI Series (Single or Double Contrast)</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50. Barium Enema (Single or Double Contrast)</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51. Small Bowel Series</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52. Esophagus</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53. Cystography/Cystourethrography</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54. ERCP</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55. Myelography</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>56. Arthrography</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgical Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57. C-Arm Procedure (Orthopedic)</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58. C-Arm Procedure (Non-Orthopedic)</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59. Chest</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60. Abdomen</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61. Orthopedic</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pediatrics (age 6 or younger)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62. Chest Routine</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>63. Upper Extremity</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>64. Lower Extremity</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65. Abdomen</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66. Mobile Study</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**RADIATION SAFETY PRACTICES**

The Radiologic Technology Program will provide student technologists with radiation monitoring devices (TLD), prior to their first scheduled clinical rotation. These TLD badges will always be worn when students are working with any form of ionizing radiation. They are considered part of the complete uniform, and are to be worn every day while at a clinical facility. Failure to do so will result in a reduction of the clinical grade, and continued non-compliance could result in unsuccessful completion of clinical courses. TLD badges should be worn in the area of the collar. When a lead apron is worn, the TLD badge is to be placed on the outside, near the collar. Student technologists who report a pregnancy will receive a second TLD badge, which will be worn at waist level.

Badge inserts are changed monthly, and it is the responsibility of each student to exchange their current insert for the latest one, within the first 5 days of the new month. Failure to do so will result in a grade reduction and continued non-compliance could result in unsuccessful completion of clinical courses. The new inserts are available at St. Patrick Hospital.

TLD badges become the responsibility of the student. They should not be worn outside of clinical facilities, or while in the capacity of radiology employment. A lost, stolen, or damaged badge must be reported to the Clinical Coordinator immediately. A temporary device may be issued to the student in order that they can continue with their clinical rotations until a new personal TLD badge is issued.

Each month, the vendor who processes the TLD badges, will provide a printout which reports exposure rates for each student. In the event of an excessive radiation report, that student will be counseled to determine how the exposure may have occurred. A possible change in rotation and procedures may be considered.

The following rules have been established for the operator’s protection against ionizing radiation during hospital and clinical observations and procedures. These rules are established for the student operator’s safety and MUST be strictly adhered to.

1. At any time during activation of the x-ray tube (when x-rays are being generated) the student should place his/her body completely behind or within the control booth and observe through the leaded window.

2. The student should not hold or support a patient during exposure or hold or support a cassette during exposure. If an emergency arises, protective aprons and gloves must be worn.

3. During activation of the tube, the student must be in direct visual line with the tube and patient. He/she may observe the patient during exposure from an adjacent room or hall, or through lead glass protective windows.
4. During an exposure or procedure, do not stand in direct line with the central ray, even when wearing a lead apron. In all cases, the tube must be pointing away from the operator’s body.

5. Under no circumstances will an operator permit another worker, student, or any other human being to serve as a model for test exposures or experimentation.

6. If during fluoroscopic procedures and mobile exams the operator must remain in the patient’s room, the following will prevail:
   a. A lead apron will be worn at all times and a thyroid shield when available, or the operator must remain behind a lead protective screen and NOT in visible line with either patient or tube.
   b. Stand as far away from the patient and tube as possible, consistent with the performance for the examination.

7. Students should abide by the “As low as reasonably achievable (ALARA)” principle in order to minimize the exposure to themselves and patients. (For monitoring purposes, the student’s exposure should not exceed 100mRem within a year. High film badge readings will result in counseling from Program faculty. Exceeding annual exposure limits may result in the student being removed from the clinical setting.)

8. Students shall not operate fluoroscopic units by themselves. This includes but is not limited to spot filming and the operation of the remote control fluoroscopic units for positioning.
DOCUMENTATION OF RADIATION MONITORING BADGE READINGS OVER 100 M\(\text{R}\)

Radiologic Technology Program

STUDENT ____________________________ Date ___________

CLINICAL SITE ____________________________________________________________

Radiation Badge Reading ____________________ m\(\text{R}\) for the month of ____________

If a student’s radiation badge reading is over 100m\(\text{R}\) for any month, the following procedure will be followed and documented.

1. Discussion between student and program director concerning reason for over exposure.

   DATE ____________________________

2. A student contract form signed by the student and program director.

   DATE ____________________________

3. Discussion with the clinical instructor concerning possible reasons for overexposure.

   DATE ____________________________

4. Recommendations made by the clinical instructor to prevent future overexposure.

   DATE ____________________________

POSSIBLE REASON AND RECOMMENDATIONS:

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Signature of Student ____________________________ Date ___________

Signature of Clinical Instructor ____________________________ Date ___________

Signature of Program Director ____________________________ Date ___________
PREGNANCY POLICY

Should any student suspect pregnancy, she is recommended to voluntarily disclose it to the Program Director. This must be in writing and indicate the expected date of delivery. In the absence of this information, a student cannot be considered pregnant.

Upon voluntary disclosure of the pregnancy, the student will:

1. Meet with the Program Director regarding the nature and potential radiation injury associated with in-uteri exposure, the regulatory limits established by the National Council on Radiation Protection and Measurement Regulatory Guide, and the required preventative measures to be taken throughout the gestational period. A statement of receipt of this information will need to be signed at this time. Through proper instruction to these precautions, it may be possible to limit all occupational exposure to under 0.5 REM per year, and prevent fetal dose limits (0.5 REM for the entire gestational period) from being surpassed.

2. Exercise the option to complete the program without any modifications. Clinical assignments are made to satisfy specific competencies required for the semester and for graduation, as specified by the American Registry of Radiologic Technologists (ARRT). As a result, clinical rotations/assignments of a pregnant student cannot be altered in order to guarantee lower radiation exposure to the fetus.

3. Decide whether or not to complete her clinical assignments when the pregnancy is over. An incomplete (I) will be assigned for clinical courses in progress. The student will be expected to re-enroll in the clinical course within one year after discontinuing due to a declared pregnancy. The remaining clinical course(s) must be completed consecutively without any semester lapses. A student wishing to exercise this option must make the request in writing to the department chairperson upon disclosure of the pregnancy.

4. Abide by the following:
   a. strict adherence to all safety precautions for protection purposes
   b. the use of a second dosimeter (which will be provided) to be worn at the student’s waist to monitor fetal dose
   c. the option to immediately stop working at any time that she feels she is working in an unsafe area or under conditions that are detrimental to herself or the fetus, she should report to the Clinical Coordinator
   d. at no time and for no reason will the pregnant student place herself in the primary beam of radiation

5. The student must complete, upon her return or when she is no longer pregnant, all clinical competencies and related course work she missed.
1. Students are to complete incident reports for accidents, complaints, lost or damaged property, and other incidents involving students with patients, visitors, employees, or other students.
2. An incident is defined as a circumstance/happening not consistent with the desired operation of the health care facility or the care of the patient.
3. Only one incident can be reported on each form.
4. Copies of the completed incident report will be placed in student files.

A. IDENTIFICATION: (individual, other than primary student, involved in incident)
   _____Patient      _____Visitor     _____Employee
   _____Male     _____Female

B. DATE & TIME of INCIDENT:
   Month__________ Day _______ Year _______ Time_______ AM___ PM___

C. INCIDENT LOCATIONS: (identify clinical affiliate and area/room)

____________________________________________________________________________
____________________________________________________________________________

D. NATURE OF INCIDENT and RELATED CAUSE:

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

E. BRIEF DESCRIPTION of INCIDENT SEQUENCE:

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

F. OTHER PEOPLE INVOLVED: (identify people by position and name)

____________________________________________________________________________
____________________________________________________________________________
G. PATIENT FACTORS THAT CONTRIBUTED TO INCIDENT:

____________________________________________________________________________

____________________________________________________________________________

H. STUDENT FACTORS THAT CONTRIBUTED TO INCIDENT:

____________________________________________________________________________

____________________________________________________________________________

I. IF INCIDENT RESULTS IN INJURY, NATURE and SEVERITY of INJURY:

____________________________________________________________________________

____________________________________________________________________________

J. IMMEDIATE CORRECTIVE ACTION TAKEN AFTER INCIDENT:

____________________________________________________________________________

____________________________________________________________________________

K. DESCRIBE ANY SUBSEQUENT ACTION:

____________________________________________________________________________

____________________________________________________________________________

L. WITNESS (ES) to INCIDENT: (name and position)

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

Printed Name and Signature of Reporting Student       Date of Report

Signature of Clinical Instructor                  Date of Review

Signature of Program Director                  Date of Review
INCIDENT REPORT FOLLOW-UP

MISSOULA COLLEGE
THE UNIVERSITY OF MONTANA
RADIOLOGIC TECHNOLOGY

A. INCIDENT REVIEWED WITH STUDENT?
   Yes _____  No _______  Date ______________

B. INCIDENT REVIEWED WITH PATIENT?
   Yes _____  No _______  Date ______________

C. INCIDENT REVIEWED WITH AFFILIATE PERSONNEL?
   Yes _____  No _______  Date ______________

D. SPOKE WITH PHYSICIAN REGARDING INCIDENT?
   Yes _____  No _______  Date ______________

E. CONCLUDING REMARKS: (assessment of injury)
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Signature of Program Faculty Conducting Follow-up  Date

Signature of Clinical Instructor  Date

Signature of Program Director  Date
SAFE AND ETHICAL CONDUCT ISSUES

Students are expected and required to function in a safe and appropriate manner at all times during clinical rotations. Students are expected and required to function in an ethical manner, and within the policies of the hospital, Missoula College - University of Montana, The Radiologic Technology Program, and the law. Students found to be functioning in an unsafe, or otherwise inappropriate manner, will be dealt with in accordance to the offense, after proper investigation of the allegations.

The following guidelines should be used by students, hospital officials, and college officials to determine what is considered unsafe or inappropriate student behavior:

**Regulatory Behavior** – the student shall function within the rules, policies, and regulations Missoula College of the University of Montana, the Program, and the clinical facility.

Examples of unsafe or inappropriate practice include but are not limited to the following:
- a. failure to follow clinical facility protocol in conduct of radiographic procedures
- b. being present at clinical settings under the influence of mind altering drugs, prescribed, or non-prescribed
- c. failure to notify the clinical coordinator and/or site coordinator of an absence or tardiness
- d. failure to make-up missed clinical time
- e. failure to adhere to the dress code

**Ethical Behavior** – the student shall function in an ethical manner at all times at the clinical facility.

Examples of unethical or inappropriate practice include but are not limited to the following:
- a. refuses assignment based on a patient’s race, culture, religious preference, gender, illness, or injury
- b. demonstrates violation of normal standards of ethical care of patients
- c. ignores the violation of normal standards of ethical care by others

**Biological, Psychological, Social, and Cultural Behavior** – the student shall function in a manner which attempts to meet the patient’s biological, psychological, sociological, and cultural needs appropriate to the radiographic procedures requested.

Examples of unsafe or inappropriate practice include but are not limited to the following:
- a. failure to display stable mental, emotional, and physical behaviors which may affect others’ well-being
- b. failure to maintain a patient’s modesty during radiographic procedures
- c. failure to maintain practices of good patient care
- d. failure to be able to function with employees of the clinical facility, peers, faculty, and medical staff, especially when such relationships affect patient care
- e. failure to demonstrate safe radiation protection behavior towards patients, others, and oneself
Accountability – the student shall be held accountable for all actions taken while in clinical settings, and shall function in a manner in which the student is able to be held accountable for all actions taken.

Examples of unsafe or inappropriate practice include but are not limited to the following:
   a. failure to use initial markers on radiographs
   b. failure to ask for assistance when needed
   c. failure to refuse to do procedures for which one is not yet qualified by means or didactic instruction or clinical supervision
   d. dishonesty

Human Rights – the student shall function in a manner in which the rights of all patients are held in the highest esteem.

Examples of unsafe or inappropriate practice include but are not limited to the following:
   a. failure to maintain patient confidentiality
   b. failure to maintain confidentiality of patient records
   c. differential treatment of patients based on their race, culture, religion, gender, illness, or injury
ATTENDANCE

Classroom Attendance

As stated in The University of Montana catalog policies and procedures for class attendance, students are expected to attend all class sessions, as well as lab sessions. Each instructor can establish attendance policies specific to the course’s needs. The instructor will communicate these policies to the students enrolled in the course.

Clinical Attendance

Clinical assignments will be made prior to each semester by the Clinical Coordinator. Students are expected to be present and punctual for all clinical assignments. Daily time sheets will be initialed by a registered technologist, verifying the time when students arrive and leave the facility. A Program week begins on Sunday at 12 a.m. and ends on Saturday at 11:59 p.m. Program involvement (clinical and classroom) cannot exceed 40 hours per week. Absences, tardy, and leaving clinical early are all figured into the attendance portion of the clinical grade. At no time should a student leave their assigned area to “visit” another area of the facility. Students who must leave clinical assignments to attend classes (other than radiology curriculum) may not substitute that class time for clinical time. Under those circumstances, students must make arrangements to return to their clinical site in order to complete their scheduled shift. There is absolutely no “banking” of hours from time that student may have accumulated as a result of staying past their scheduled end of shift.

Absence Notification

It is the student’s responsibility to personally notify the Clinical Coordinator and Site Instructor of any absence, tardy, or need to leave clinical early. If an absence or tardy is to occur, the student is to contact both coordinators (not a secretary or other staff member), at least 30 minutes prior to the start of their scheduled clinical. If this procedure is not followed, a verbal warning will be issued and documentation of such will be placed in the student’s file. Each student is allowed five (5) personal days for the Spring/Summer Semester and then another five (5) personal days for the fall/spring semester. These days can be used for any reason the student deems necessary (illness, family event, appointments) and will be considered excused. Arrangements will have to be made to make up any days missed from clinical beyond the allotted 5, within the given amount of time. Students are responsible for making arrangements with Site Coordinator at the facility where the time must be made up, and any failure to do so may result in a reduction of the clinical grade. (Extenuating circumstances, such as car accidents, will be taken into consideration).

A student is considered tardy if he/she is later than five (5) minutes past the scheduled time for reporting to his/her assigned area. For disciplinary progression, the following applies: “If a student is tardy to clinicals three times in a rotation, it will be counted as a full day absent, and treated as such.”

Three days of funeral leave may be granted for a death in the immediate family. That would include: mother, father, husband, wife, significant other, children, sister, brother, mother-in-law, father-in-law, and grandparents. Any additional time must be approved by the Program Director.
A copy of the Clinical Schedule Change form must be completed for each absence that a student acquires. Each form must be signed by the student whose schedule has been altered and the Clinical Coordinator. These forms must be presented to the Clinical Coordinator within the required amount of days, and a copy of each will be kept on file in the student’s folder.

Students are allowed a thirty (30) minute lunch break, which will be scheduled according to the shift the students are working and at the discretion of the supervising technologist. Additionally, students are permitted a fifteen (15) minute break for every four (4) hours they are in attendance, to be taken at the discretion of the supervising technologist. These are the only times at which a student may leave the assigned clinical area; however, the student should not visit other areas of the facility during break time.

**HOLIDAYS AND VACATIONS**

Holidays will be in accordance with The University of Montana academic calendars. Students will not be scheduled for clinical rotations over official University holidays, or during semester breaks. The Radiologic Technology Program makes no provision for any vacation time to students in the Program, other than semester breaks, and the vacation periods scheduled on The University calendar. A student may not shorten the duration of their clinical rotation by accumulating compensatory time. This is true for all semesters, including the final clinical course. The academic calendar can be found at [http://www.umt.edu/provost/academiccalendar.html](http://www.umt.edu/provost/academiccalendar.html).

Should a student inadvertently be scheduled on a day on which they normally participate in religious observation, this should be brought to the attention of the Clinical Coordinator so that an adjustment in their clinical schedule can be made to suit their needs.
Clinical Schedule Change(s)  
Approval Form

Student Name:_____________________________________
Date Submitted:_____________

Type of Schedule Change:       □ Personal Day

□ Professional Day

Conference/Training Attended:
________________________________________________________________________
________________________________________________________________________

Originally Scheduled Day(s) Not In Attendance:
________________________________________

Available Personal Days Remaining:________

Requesting Student’s
Signature:__________________________ Date:________________

Clinical Coordinator’s
Signature:__________________________ Date:________________

Site Coordinator’s
Signature:__________________________ Date:________________

□ APPROVED        □ NOT APPROVED
PERSONAL APPEARANCE/UNIFORM POLICY

The personal appearance and demeanor of Radiologic Technology students at The Missoula College, reflect the standards of the Profession, the College, and the Program, and are indicative of the students’ interest and pride in their chosen profession.

All Radiologic Technology students will be required to wear maroon colored uniform scrub pants, and matching uniform tops. A patch, representing The University of Montana, must be affixed to the left shoulder of the uniform top, unless the scrubs come with a Griz logo. Uniforms and patches are available at the Mountain Campus Bookstore, as well as, the Missoula College Bookstore. Surgery scrubs are to be worn only during the performance of a surgery assignment or during an assigned surgery rotation. Only white lab coats may be worn over uniforms. These can be purchased through uniform stores. White t-shirts, with long or short sleeves, may be worn underneath uniform tops. Graphics should not be visible on the sleeves or neck area of the t-shirt. Socks that rise above the ankles must be worn at all times. Uniform shoes or sneakers are to be of a solid white, gray, or black color, with closed toes and backs, and without cut-out openings over the tops of toe area. A hospital identification name tag with a facial photograph clearly visible is considered part of the required uniform, as are right and left initial markers. Hospital identification name tags will be supplied by the clinical affiliates, and students will purchase markers during the first semester of the Radiologic Technology Program.

Any student reporting to the clinical affiliate in a uniform which is soiled, untidy, or improper will be asked to leave and an absence will be recorded. This time away will have to be made up, and a verbal warning will be recorded in the student’s file. Clinical site coordinators will have the final say when judging the personal appearance of the student. Missoula College students will wear their uniforms only for clinical assignments or when officially representing the Program.

Grooming

- Students are expected to shower or bathe prior to clinical rotations.
- The use of deodorant /antiperspirant is expected.
- Perfume, cologne, and heavily scented hair products should not be worn during clinical rotations.
- Nails should be kept short, neat, and clean. Acrylic, false, or press-on nails may not be worn. Clear nail polish is acceptable.
- All tattoos that would be visible while dressed in the required clinical uniform must be kept covered during scheduled rotation hours.
- Facial jewelry, unless worn for religious or cultural reasons, and found not to interfere with work performance, is not permitted in clinical settings.
- All other jewelry is limited to a wedding ring, an engagement ring, a watch, and one small stud earring per ear.
• Cosmetics should be moderately applied and appropriate for daytime wear.

• Hair must be clean, and appear to be dry. If it is longer than chin length, it must be pulled back, or put up in a conservative fashion, so that it is kept contained, and off the face at all times. This applies to male and female students alike. Proper and regular grooming is expected in order to maintain a professional appearance.

• Faces must be cleanly shaven. Stubble is not acceptable. Beards and mustaches are allowed if kept neatly groomed. Male students may claim that they are growing beards/mustaches a maximum of two times a year while enrolled in the Radiologic Technology Program.

• Gum is not to be chewed in clinical areas.

• Uniform pants should be worn high enough on the hips so that under garments are not visible when the student bends over, and so that excessive fabric does not fall below the heel of the shoe.

• Uniform tops should fall 3-4 inches below the waist, and should not be worn in a form fitting manner.

• Cell phones/pagers are not allowed to be carried during clinical rotations or labs.
PROGRESSIVE DISCIPLINARY SYSTEM

Rules and regulations are necessary in any organization in order to insure consistency and orderly operation, as well as to protect the rights and safety of all concerned. The rules as outlined in this handbook and those found in the Student Conduct Code( http://life.umt.edu/vpsa/student_conduct.php) of the University of Montana, are published to promote understanding of what is considered unacceptable conduct and to encourage consistent action in the event of violations.

It is the sincere desire of the Missoula College faculty to assist all students, in every way possible, with an outcome of providing the very best education possible and the finest patient care available. However, willful or inexcusable breaches of rules will be dealt with firmly, under a uniform policy that applies equally to all students.

The Radiologic Technology Program may use a progressive disciplinary system that applies a series of more serious penalties for successive violations of policy, procedure, rules, or standards. The types of penalties used in this system and the consequences of each are as follows:

1. **Verbal Warning** – An informal notification to a student that his /her behavior, performance, and/or actions are unacceptable and that stronger disciplinary action will result if the problem area(s) is not corrected. A record sheet is maintained in the student’s file to indicate the date and reason for the verbal warning.

2. **Written Warning** – This is a formal behavioral agreement, drawn up between the student, the Program Director, and the Clinical Coordinator. It lists the specific behaviors, performances, and/or actions that are unacceptable and that need to be corrected within a designated amount of time. Failure to correct these problem areas, within the given time frame, will result in more serious disciplinary actions or complete dismissal from the program. One copy of the written agreement will be provided to the student, while another will be entered into the student’s file as documentation of a warning to the student.

3. **Dismissal** – If, after the appropriate actions have been carried out and the student still fails to improve performance or continues repeated infractions, the student will be dismissed from the program. Dependent on the violation, a student can be subject to immediate dismissal from the Program without prior disciplinary action being taken.

4. **Violations Not Listed** – From time to time, violations of policy, procedure, rules, or standards may occur that are not listed in this handbook. When this occurs, and discipline is necessary, the Program Director, the Clinical Coordinator, the College Administration, and the Dean of Students will agree in advance on the proper disciplinary progression.
SUMMARY OF MOST IMPORTANT RULES

1. Radiology students must always be supervised according to the definitions of direct/indirect supervision.

2. Students will never be used to replace paid staff.

3. Students are required to ask all female patients with reasonable reproductive potential, if there is a chance they might be pregnant.

4. Students are required to shield all patients when possible.

5. Noted on the requisition should be the initials of the technologist who has approved the images turned in by the student.

6. A radiologic technologist should be in the exam room whenever a student must repeat an exam.

7. Students are required to wear the proper Missoula College uniform whenever involved in a clinical assignment, including labs and simulations. “Green Scrubs” are allowed only when participating in surgery during a rotation.

8. Students are required to report any absence to their clinical coordinator and their site coordinator at least 30 minutes prior to their scheduled time of attendance.

9. If a student is tardy to clinical setting three times in a rotation, it will be counted as a full day absent, and treated as such.

10. If it is a necessity that a patient be held while being exposed to radiation, someone other than a student should be asked to assist with the procedure and to hold the patient.

11. While performing fluoroscopic, mobile, and surgical procedures, students will always wear protective lead aprons. A radiation exposure monitoring badge will be fastened to the outside of the apron, in the area of the collar.

12. No student will perform a radiographic study without a physician’s order.
CHANGE OF PERSONAL INFORMATION

Each student is responsible for providing the Missoula College and the Program with information regarding a change in postal address, email address, and phone number. This information is important in case of an emergency during the time the student is a part of the Program. This also assists in mailing any correspondence and post graduate material to each alumni.

WITHDRAWAL

A student who wishes to withdraw from the Radiologic Technology Program is urged to schedule an exit interview with the Program Director. If a student wishes to withdraw from a specific course, the student must abide by the dates given in the class schedule for that particular semester.

TRANSPORTATION

Radiologic Technology students will be responsible for providing their own transportation to all facilities used for their educational experiences including clinical affiliates. Each facility will provide detailed instructions for acceptable student parking areas. Upon admission to the College, a parking permit must be obtained and displayed in the front window of the vehicle. This permits students to use the parking areas designated for student use. Any violations will be the responsibility of the student.

INCLEMENT WEATHER

If the Missoula College closes due to snow or ice, an announcement will be made as early as possible on the local radio stations. If an announcement concerning closing is not made before a student must leave for the College or their clinical site, then the student must use good judgment in making a decision to attend classes or not. If the student does not attend when the College is open and operating normally, then the day is an unexcused absence, and must be made up. When the College is closed, clinicals are also cancelled. If the College closes during the day, students will be dismissed from the College or the clinical areas.

PERSONAL TELEPHONE CALLS/CELL PHONE USAGE

Personal telephone calls are not allowed. Only emergency calls can be received by students. Messages will be taken for other calls. Cell phones should be turned off at all medical facilities and during classes. Cell phones should not be carried into the working areas at the clinical sites.
INTERNET USAGE

Students are not to use computers at clinical education sites for personal use. This includes accessing the internet, checking personal emails or instant messaging, unless researching professional information required of class projects. However, students may use the Internet for online class work with the permission of the facility.

EATING AND SMOKING

Students shall only eat or drink while on duty in designated areas. Most facilities ban smoking and students are required to follow the rules of the institution. The University of Montana is a smoke free campus; therefore, smoking is not allowed on the Missoula College campus.
LIABILITY COVERAGE

Malpractice insurance or liability coverage is purchased through The University of Montana. Payment is collected through fees paid when enrolling in Radiology Technology courses. This insurance covers incidents involving litigation resulting from possible negligence in patient care. Injuries to students while in their clinical rotation will be covered by the students’ personal health insurance. All accidents that occur while on clinical assignments, which result in patient, site personnel or personal injury, and/or damage to equipment, must be reported immediately to the Site Coordinator and Program Coordinator. An incident report must be written to document what took place.

HEALTH and ACCIDENT INSURANCE

In the case of accidents or illnesses which occur during school hours, the following policies will apply:

- If a student becomes ill or injured while in clinical, he/she should report directly to the Site Coordinator or lead technologist.
- The student will follow the affiliate’s policy on reporting incidents.
- The student will send a copy of the report to the Clinical Coordinator or will fill out a separate incident report found in the Student Handbook found on page 39.

The student is financially responsible for his/her own treatment. A student always has the right to refuse treatment.

Students, no matter their credit load, must pay the Curry Health Fee in order to access:
- Medical Clinic Office Visits
- Consultant Visits
- 24/7 Urgent Care
- Low Cost Lab and X-Rays
- Reduced Rate Dental Fees
- Reduced Rate Counseling Fees
- No Charge for Group Counseling
- And any other service Curry Health Center provides

WORK RELATED POLICIES

If a hospital/clinic desires a student be in their employ and asks that students work for them outside of academic/clinical hours, there must be an individual agreement between the hospital/clinic and the student. The hospital/clinic must provide separate identification name tags and a separate film badge. Students will not be allowed to use their student name badge or TLD badge provided by the facility. All Program students are strongly advised that if possible, work hours limited to 20 hours per week during their academic/clinical terms be
ALCOHOL & DRUG POLICY

The Drug-Free Schools and Communities Act Amendments of 1989 prohibit, at a minimum, “the unlawful distribution, possession, or use of illicit drugs and alcohol by students and employees” on school and campus property or as part of any school or campus activity. Standards more rigid than those required by this Act may be imposed. Personnel and Student Conduct Code action will be taken against any violators of this act.
LATEX SENSITIVITY STATEMENT

As the use of latex gloves and other latex items became more frequent in the 1980’s, so did the number of repeated health problems related to latex. Hundred of items in the health care field contain latex, and latex sensitivity often becomes worse with more frequent exposure to latex.

Plan 1: If you think you may have a latex allergy, see a physician called an allergist, and request a blood test to determine your sensitivity.

Plan 2: If it is determined you are sensitive to latex, minimize or avoid contact with latex. Check package labels, avoid powdered gloves, select nitrite or vinyl gloves if appropriate/available and wash hands immediately after wearing gloves.

Plan 3: Notify your instructor if you develop a skin rash or you have difficulty breathing after using/wearing latex products.

Plan 4: Follow any physician recommended treatment of precautions.

I have read the above information and had an opportunity to ask questions. I agree to abide by the four step plan to reduce my risk of latex exposure.

_________________________________________  ______________________________
Student Signature       Date

_________________________________________  ______________________________
Instructor Signature       Date
STUDENT POLICY ON BLOODBORNE PATHOGENS

Students in any academic, research, or occupational program at The University of Montana at risk for bloodborne pathogen exposure are required to initiate the Hepatitis B vaccination series prior to their first potential exposure. Exceptions include students who have previously received the complete Hepatitis B vaccination series and antibody testing that revealed the student is immune or the vaccine is contraindicated for medical reasons. Students must also have training comparable to that required in the OSHA Bloodborne Pathogen Standard prior to initial placement in a clinical or academic setting where there is reasonable anticipation of a potential bloodborne pathogen exposure.

Students who cannot meet this requirement, for personal or health reasons, must have their case reviewed by the Institutional Biohazards Committee (IBC) on an individual basis. Final approval or waiver must be granted in writing, prior to their first potential exposure to human blood or other potentially infectious materials. Records of the waiver or approval shall be kept in the students file within the department.

Procedure:

1. Students who are unable to meet the immunity documentation requirements or initiation of the vaccination series, for personal or health reasons must provide written documentation of the reasons, which will be reviewed by the Institutional Biohazards Committee. Requests for review by the IBC must be made by the student early enough to allow resolution prior to the student’s first potential exposure to human blood or other potentially infectious materials.

2. Per CDC guidelines, students who do not respond to the primary vaccine series should complete a second 3-dose vaccine series or be evaluated to determine if they are Hepatitis B surface antigen (HbsAG)-positive. Revaccinated persons should be tested at the completion of the second series. Persons who do not respond to initial 3-dose vaccine series have a 30-50% chance of responding to a second dose 3-dose series. Persons who are proved to be HbsAg-positive should be counseled regarding how to prevent HBV infection to others and the need of medical evaluation. Non-responders to vaccination who are HbsAG-negative should be considered susceptible to HBV infection and should obtain Hepatitis B immunoglobulin (HBIG) prophylaxis for any known or probable parenteral exposure to HbsAG-positive blood.

3. Effective June 1996, students are required to present, prior to their first potential exposure to human blood or other potentially infectious materials:
   a. documentation of serologic immunity ($\geq 10$ mIU/ml) or
   b. documentation of immunization series with plan for final titer and revaccination or booster as indicated (see #2 above) or
   c. documentation of completed review by the Institutional Biosafety Committee (IBC) and signed by the IBC Chairperson with statement of exemption from immunization requirement and waiver form signed by the student or
   d. documentation of initiation of the immunization series.

Students will not be allowed in areas or settings which may present their first potential exposure to human blood or other potentially infectious materials without this documentation.
EXPOSURES

If a student has an exposure (i.e., eye, mouth, mucous membrane, non-intact skin, or parenteral contact with blood or potentially infectious materials) in a setting sponsored by the College then The University of Montana will provide post exposure testing for the student and source individual provided the testing is not otherwise covered in the setting where the exposure occurred. Testing and counseling shall be done at the Curry Health Center whenever possible. Records of the exposure and follow-up shall be kept in the student’s file in the Environmental Health and Occupational Safety Office.

TRAINING

Student training shall be done prior to the student’s first potential exposure to bloodborne pathogens. Training shall include the requirements of the Bloodborne Pathogen Standard, universal precautions and The University of Montana policy. This training may be incorporated into class materials or done through the semi-annual training provided for The University at large at the beginning of each semester. Students are required to show proof of tuberculin and hepatitis immunizations before being able to participate in the program.

COMMUNICABLE DISEASES

Radiology personnel may be exposed to a wide variety of microorganisms through the blood and other body fluids of patients they encounter in the radiology department, as well as the emergency room, operating room, recovery room, and patient rooms. You should be aware that radiology students take part in invasive procedures.

During student experiences in the clinical setting, students may possibly come in contact with diseases, equipment, and treatments that may be hazardous to the individual and/or to an unborn fetus. Infections may be transmitted in the clinical environment by blood, saliva, or other body fluids. This may occur through direct contact, droplets, or aerosols. There is also the potential for transmission of infection through indirect contact.

Because of the number of people using the clinical facilities, it is critical that every student and faculty member who delivers patient care practice effective infection control procedures. It is expected that students will use common sense, and good patient care procedures, related to bloodborne pathogens that minimize risks. In order to minimize the possibility of transmitting disease in the clinical setting, certain procedures will be practiced by students. Therefore, students of the Radiologic Technology Program shall follow the precautions recommended by the Association for Practitioners in Infection Control (APIC), the Occupational Safety and Health Administration (OSHA), and the policies for exposure control at the affiliate site.

The APIC recommends the use of universal precautions where the handling or exposure to blood and body fluids are concerned. The following are guidelines recommended by the APIC:
1. Hands should always be washed before and after contact with patients. Hands should be washed even when gloves have been used. If hands come into contact with blood, body fluids, or human tissue, they should be washed immediately with soap and water.

2. Gloves should be worn when contact with blood, body fluids, tissues, or a contaminated surface is anticipated.

3. Gowns are indicated if blood splattering is anticipated.

4. Masks and protective goggles should be worn if aerosolizing or splattering are likely to occur.

5. Emergency mouth-to-mouth resuscitation, mouth pieces, resuscitation bags, or other ventilation devices should be strategically located and available to use in areas where the need for resuscitation is predictable.

6. Sharp objects should be handled in such a manner as to prevent accidental cuts or punctures. Used needles should not be bent, broken, reinserted into their original sheath, or unnecessarily handled. They should be discarded intact immediately after use into an impervious needle disposal box, which should be readily accessible. All needle stick accidents, mucosal splashes, or contamination of open wounds with blood or body fluids, should be reported to the Site Coordinator immediately.

7. Blood spills should be cleaned up promptly with a disinfectant solution.

8. All blood and body fluid specimens should be considered biohazardous.

If a student has an incident occur involving contact with bloodborne pathogens, it is expected that the student will immediately see their own physician to establish baseline testing. They should then seek any required follow-up. Tuberculosis exposure should be immediately followed with another Mantoux test and a three (3) month follow-up after that.

There is also the chance that students/personnel may transmit diseases to patients. As a result, it is expected that students follow the policies in effect at the clinical site where they are assigned, in addition to the following guidelines:

1. Students with communicable diseases that are transferred by air or contact, and are of short duration, may not attend clinical courses. They must inform the Clinical Coordinator of their absence from clinicals. Make-up time must be arranged with the Clinical Coordinator and the Site Coordinator.

2. If a student has any of the following conditions, he/she is to notify the Clinical Coordinator prior to clinical assignment:
   - chicken pox, shingles
   - scabies, lice
   - hepatitis
   - eye infection
   - tuberculosis
   - measles, mumps, or rubella
- cold sores (herpes simplex infection)
- influenza
- strep throat

3. Students with communicable diseases that have a long duration must present a written diagnosis to the Clinical Coordinator and the clinical facility. Dependent upon the diagnosis, the student may be able to perform clinical assignments with restrictions regarding patient contact, or they may be asked to discontinue clinical activities until the illness is resolved. Each reported incident will be handled on a case-by-case basis, with respect for the person’s right to privacy, and with consideration for protecting his/her own welfare, as well as the welfare of others. All information will remain confidential and will not be released unless mandated by law.

4. Persons having AIDS, or a positive antibody test for AIDS, shall be treated as any other student or employee on campus.

5. Students participating in course work or activities in which there exists a reasonable potential for the exchange of certain body fluids, shall be made aware of any departmental policies and procedures concerned with communicable diseases, by the responsible faculty.

6. Services are available at the Curry Health Center for students who have AIDS, AIDS related illnesses, other communicable diseases, and/or concerns regarding AIDS and communicable diseases.
PROFESSIONAL SOCIETIES

Students are encouraged to join the professional societies. Professional publications, announcements of annual meetings and reduced participation fees are available to members.

Suggested societies for membership are:

The American Registry of Radiologic Technologists (ARRT)
1255 Northland Drive
St. Paul, Minnesota  55120-1155
http://www.arrt.org

The American Society of Radiologic Technologists (ASRT)
15000 Central Avenue S.E.
Albuquerque, New Mexico  87123-3917
http://www.asrt.org

The Association of Collegiate Educators in Radiologic Technology (ACERT)
PO Box 150287
Ogden, Utah  84415-0287
http://www.acert.org

Montana State Board of Radiologic Technology
Helena Lee
301 South Park, 4th Floor
PO Box 200513
Helena, Montana  59620-0513
dlibsdrts@mt.gov

The Montana Society of Radiologic Technologists (MSRT)
Joan Fisk
702 E. Morse
Dillon, MT  59725

Scholarships and other financial opportunities are available through many of the professional organizations.
FREQUENTLY ASKED QUESTIONS

1. How difficult is it to be accepted into the Program?
The increased interest in radiography over the past few years has indeed resulted in an increased number of applicants applying for a limited number (12) positions in the program and has therefore made the application process more competitive. Given this fact, for any applicant to be considered for acceptance, he/she will need to demonstrate a history of successful academic performance as well as work experience that is compatible with both the academic and healthcare environment. Our selection panel evaluates many factors when selecting candidates for the program and has found that there is no “model” for the ideal student. There is no one factor or attribute that can guarantee acceptance into the program.

2. What is considered when applications are evaluated?
Applications are evaluated for strong academic background. This can come from courses taken at the Missoula College or courses taken at other colleges/universities which have been accepted for transfer credits at the Missoula College. Also, work experience with customer contact and service-oriented emphasis is considered. Candidates should possess good written and interpersonal communication skills and a discernible interest in health care.

3. How can I enhance my chances of being accepted?
Given the tremendous interest in our program, we cannot guarantee that any candidate will be accepted. Each candidate is expected to introspectively evaluate his/her own strengths and weaknesses and to establish a plan that reveals relevant strengths. Program staff is happy to discuss the perceived strengths and weaknesses with candidates who were not accepted.

A strong candidate will possess a healthy balance of characteristics and skills deemed desirable by the faculty and include:

- A proven record of academic success
- Work experience with the public in the service sector
- Knowledge of the field of radiography, including the less than desirable aspects
- Possesses a strong work ethic, positive attitude, and caring demeanor desirable of a health caregiver
- Communicates well verbally and in writing
- Able to think critically and come up with solutions to problems outside of the ordinary
- Can work well independently, as well as play a vital part as a member of a health care team

4. If there is such a large demand for radiographers why do you limit the number of students in the program?
We have a limited number of clinical sites affiliated with the program. We must limit the number of students assigned to each facility in order to ensure that each student receives enough opportunities for hands-on experience to master the skills required of a radiographic technologist. We believe it is better to produce a more qualified technologist, rather than just more technologists.

5. Do all program participants have to travel to clinical facilities outside of Missoula?
The program faculty is sensitive to the inconveniences of traveling for clinicals and makes every reasonable effort to minimize the travel expectations. However, traveling is necessary and a reasonable expectation given the learning opportunities that result. At least once during the program, students are required to travel to one of our affiliated sites in Hamilton, Ronan, or Polson. We encourage students to strike out and participate in clinical learning experiences in
rural Montana, and/or other vicinities. Traveling affords students the opportunity to a full, comprehensive education in diverse settings, with access to various forms of radiologic technology. We believe these experiences make our graduates highly marketable. We encourage all candidates to inquire of all programs regarding their travel expectations and to weigh the costs of travel (i.e., gasoline and child care) with tuition, text books, and additional program fees and expenses.

6. Are college programs better than hospital programs?
The short answer is: no. Radiology managers do not express a preference for college graduates over hospital trained entry level radiographers. Hospital graduates tend to have more clinical experience and must master the same radiography curriculum to graduate. If a radiographer who has participated in a college based program aspires to become a manager or educator, they will already have the foundation of an Associate’s degree. In 2015 the ASRT will require all students graduating as a Radiologic Technologist to have an associate degree regardless of graduating from a hospital or college based program.

7. What are starting salaries for Radiologic Technologists?
Starting salaries vary around the country. Many facilities will offer sign-on bonuses, reimbursement for tuition and/or relocation expenses, should you decide to move. Entry level salaries in Montana average around $19.00 per hour.

8. Can I work full-time while participating in the program?
This is a very common and poignant question and an issue we cannot emphasize enough to be seriously considered by each individual applying to the program. Although we cannot dictate what a student does outside of the program, past experiences have demonstrated that it is extremely difficult to successfully meet the requirements of the program while working a full-time job. Some factors to consider beyond an individual’s personal stamina and abilities are:

- physical and mental demands of the job
- flexibility of schedule – weekend vs. after program hours, and ability to reduce/switch hours to accommodate program
- additional personal/family responsibilities
- study time requirements outside of program hours
- knowing your learning style – are you a quick learner, or an individual who needs to spend a fair amount of time on task in order to master material

Many students do work part-time while in the program. The program faculty, while sympathetic and understanding of financial situations cannot lower performance expectations based on a need to work outside of the program. Ultimately, it is for each individual to honestly evaluate their abilities, both physical and academic, and determine if after the commitment to the program hours, and the hours spent at a job, that there will still be enough time left to eat, sleep, study, travel, and fulfill family responsibilities while meeting the requirements of the Radiologic Technology program for its entire duration.

9. Do you allow students to attend the program part-time, or only on evenings or weekends?
The program is full-time and five (5) consecutive semesters in length. During the week, a student may spend up to forty (40) hours in clinicals (summer semester). Clinical rotations will be scheduled so that each student has required, varying shifts, which will include days, evenings, and weekends. The program is unable to accommodate applicants seeking any form of part-time education.
GLOSSARY

**Affiliation Agreement** – a formal written understanding between an institution sponsoring the program and an independent clinical education setting.

**American Registry of Radiologic Technologists (AART) Certification** – issues certifications to operate radiation producing equipment.

**Assessment** – the systematic collection, review, and use of information to improve student learning, educational quality, and program effectiveness.

**Clinical Educational Setting** – a facility recognized as meeting appropriate qualifications for delivering clinical education and evaluation of clinical competency.

**Competency** – the ability to function within a realm of limited supervision and assume those duties and responsibilities as set forth in course and clinical objectives.

**Direct Supervision** – Student supervision by a qualified practitioner, who reviews the procedure in relation to the student’s achievement, evaluates the condition of the patient in relation to the student’s knowledge, is present during the procedure, and reviews and approves the procedure. A qualified radiographer is present during student performance of a repeat of any unsatisfactory radiograph.

**Goals** – ends or results the Program wants to achieve.

**Indirect Supervision** – for radiography, that supervision provided by a qualified practitioner immediately available to assist students regardless of the level of student achievement. Immediately available is interpreted as the physical presence of a qualified practitioner adjacent to the room or location where a radiographic procedure is being performed. This availability applies to all areas where ionizing radiation equipment is in use.

**Laboratory** – a separate work area for student practice. It should include a phantom, radiographic table, overhead tube, and accessories.

**Mission Statement** – a means to communicate an educational vision and purpose.

**Radiographic Examination (Exam)** – a series of radiographic exposures of an anatomical body part.

**Simulation** – the student shall perform the radiographic examination on a radiographic phantom or on a live subject (not a patient) and simulate the exposure. A radiograph of the area in question shall be used for determining the student’s ability to critique a final image.
CONFIDENTIALITY STATEMENT FOR ALL CLINICAL SITES

All information pertaining to patients, medical records and reports, or personnel records is strictly confidential.

Anyone found reading records, discussing patient information, or imparting confidential information except when authorized to do so, is liable to instant dismissal from the clinical Radiologic Technology Program at the Missoula College.

I, ____________________________, understand the above policy and agree to respect and keep absolutely confidential all information I may hear or read pertaining to patients, medical records, or staff personnel records.

Student’s Signature ___________________________ Date ______________________

*STUDENT COPY

retain top half

CUT HERE  ____________________________________________________________

turn in lower half

CONFIDENTIALITY STATEMENT FOR ALL CLINICAL SITES

All information pertaining to patients, medical records and reports, or personnel records is strictly confidential.

Anyone found reading records, discussing patient information, or imparting confidential information except when authorized to do so, is liable to instant dismissal from the clinical Radiography Technology Program, at the Missoula College.

I, ____________________________, understand the above policy and agree to respect and keep absolutely confidential all information I may hear or read pertaining to patients, medical records, or staff personnel records.

Student’s Signature ___________________________ Date ______________________

* FILE COPY
MEMORANDUM OF AGREEMENT

University of Montana
Missoula College
Radiologic Technology

I have read the Radiologic Technology Program Handbook in its entirety and I am familiar with its content. I expect any violation to result in appropriate action.

I understand that it is my responsibility to review the appropriate sections of the handbook when confronted with a specific problem or concern, and then to contact the Clinical Coordinator or Program Director at the time I would like clarification.

I understand that I will be a guest in the Clinical Education Settings and will conduct myself accordingly. All known rules and regulations will be followed.

I understand that the Clinical settings may vary in location and that all students are expected to meet the same requirements; therefore, distance and weather do not change the program schedule unless classes are cancelled.

I understand that I may not function independently as a registered technologist and the Clinical Coordinator and Site Instructor will determine appropriate supervision, and that I will request the presence of a registered technologist when I repeat radiographs for the second time.

I understand that I will receive a syllabus for each professional course in the curriculum and will abide by those requirements for each course as appropriate.

I understand as a student in the Radiologic Technology Program, at The Missoula College, I represent not only The College, but the clinical education settings, in my contact with patients, visitors, and members of the community. The impression I leave with each person is very important to the affiliate sites and all the people involved in the healthcare team, as well as to me and fellow students.

I understand that the clinical affiliation reserves the right to refuse admission to any Radiologic Technology student who is involved in any activity not considered professional or conducive to proper patient care.

_____________________________________________   _____________________________
SIGNATURE        DATE

When you have finished reading the entire Memorandum of Agreement, please sign both statements below, remove the lower half of the page, and return it to the Clinical Coordinator.

I have read and agree to the requirements of Radiologic Technology Program as defined in the Student Handbook, and understand that failure to abide by the policies will be grounds for disciplinary action and possible dismissal from the program.

STUDENT SIGNATURE: _________________________________   DATE: ____________

NAME (printed): __________________________________________
PHONE: ___________________   E-MAIL: ____________________

PROGRAM DIRECTOR (signature): ____________________________
CLINICAL COORDINATOR (signature): _______________________

Retain - Student Copy
When you have finished reading the entire Memorandum of Agreement, please sign both statements, keep the student copy with your handbook and sign and return this page to the Clinical Coordinator for your permanent file.

I have read and agree to the requirements of Radiologic Technology Program as defined in the Student Handbook, and understand that failure to abide by the policies will be grounds for disciplinary action and possible dismissal from the program.

STUDENT SIGNATURE: _____________________________________________

DATE:___________________

NAME (printed):_____________________________________________________

PHONE:_________________________

E-MAIL:_______________________________________

PROGRAM DIRECTOR (signature):________________________________________

CLINICAL COORDINATOR (signature):

Director Copy