RADIOLOGIC TECHNOLOGY PROGRAM HANDBOOK

2018-2020

900 HIGHWAY 34 EAST
DETROIT LAKES, MN 56501
218-846-3700

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I. College and Program Officials

M State Administrative Personnel

Dr. Carrie Brimhall
President Minnesota State Community and Technical College

Karen Buboltz
Associate Dean of Academic and Student Affairs
Detroit Lakes Campus

At this time, M State organizational charts are being updated.

Radiologic Technology Program Officials and Faculty

Ann Bell-Pfeifer M.S. R.T. (R)(M)(QM)	Program Director
Colleen Brady-Santwire M.S. R.T. (R)(M)	Faculty
Amy Coley B.S. R.T. (R)(T)	Clinical Coordinator
	M State - Detroit Lakes, MN
Jan Pray R.T. (R)	Clinical Instructor
Lana Glover R.T. (R)	Clinical Instructor
	Essentia Health – South University, Fargo, ND
Lee Current R.T. (R)(CT)(BD)	Clinical Instructor
	Lakewood Health System, Staples, MN
Janet Larson R.T. (R)(M)	Clinical Instructor
	Lake Region Healthcare Corporation, Fergus Falls, MN
April Hoaby R.T. (R)	Clinical Instructor
	Perham Health, Perham, MN
Melissa Watson R.T. (R)(CT)(MR)	Clinical Instructor
Sarah Buhr R.T. (R)	Clinical Instructor
Kathy Hohenstein R.T. (R)	Essentia Health St. Mary's, Detroit Lakes, MN
Shonna Melchior R.T. (R)	Clinical Instructor
	Tri-County Hospital, Wadena, MN
Aaron Wohlenhaus R.T. (R)	Clinical Instructor
David Jacobsen R.T. (R)(CT)	Veteran Affairs Medical Center, Fargo, ND

Radiologic Technology Program Officials and Faculty
(Continued)

Renelle Kunkel R.T. (R)	Clinical Instructor
Kerrie Lewis R.T. (R)	Clinical Instructor
	Essentia Health, Fargo, ND
Tiera Opatz (R)	Clinical Instructor
	CHI Lisbon Health, Lisbon, ND
Aaron Lardy R.T. (R)(CT)	Clinical Instructor
	Centra Care, Sauk Centre, MN
Position Open	Clinical Instructor
	Glacial Ridge Health System, Glenwood, MN
Rachel Skoog R.T. (R)	Clinical Instructor
	Essentia Health, Park Rapids, MN
Erin Haanen-Biel R. T. (R)	Clinical Instructor
	Coteau Des Prairies Hospital and Clinic, Sisseton, SD
Angela Bjerknes R.T. (R)(CT)	Clinical Instructor
Rebecca Meisner R.T. (R)(M)(CT)	Clinical Instructor
	Sanford Medical Center, Bemidji, MN
Erika Zavada R.T. (R)	Clinical Instructor
Angela Harri R.T. (R)	Clinical Instructor
	Hennepin County Medical Center, Minneapolis, MN
Jillian Haseleu R.T. (R)(M)	Clinical Instructor
	Sanford Health, Valley City, ND

Revised: 7/25/19

Radiologic Technology Health Facility Partners & Clinical Education Sites – JRC Approved Minnesota State Community and Technical College – Detroit Lakes		
The following health care organizations provide students with clinical rotation facilities and instructors. Students may rotate through any of the listed facilities during the 27 months of the program.		
Health Care Facility/Address	**Department Manager**	**Clinical Instructor (CI)**
Centra Care Health Center-Sauk Centre 425 N Elm Str Sauk Centre, MN 56378	Holly Tegels, RT (R) TegelsH@centracare.com 320-352-2221 ext 1636	Aaron Lardy RT (R) 320-352-2221 ext 1636 LardyA2@centracare.com
Coteau Des Prairies Hospital and Clinic 205 Orchard Dr. Sisseton, SD 57262	Trish Crosby, RT (R) Radiology Manager 605-698-4630 trishac@cdphospital.com	Erin Haanen-Biel RT (R) Erinh@cdphospital.com 605-698-4638
Essentia Health 3000 32nd Ave S Fargo, ND 58103	Bret Beach B.S., RT(R) CNMT Imaging Manager Essentia Health 701-364-8204 Bret.Beach@essentiahealth.org	Chelsy Tangen RT (R) Chelsy.tangen@essentiahealth.org Renelle Kunkel RT (R) Renelle.Kunkel@essentiahealth.org 701-364-8000 701364-8241 (fax)
Essentia Health – South University 1702 South University Dr. Fargo, ND 58103	Bret Beach B.S., RT(R) CNMT Imaging Manager Essentia Health 701-364-8204 Bret.Beach@essentiahealth.org	Jan Pray RT (R) 701-364-3288 Jan.pray@essentiahealth.org 701-364-3300/800-437-4054 Lana Glover RT (R) 701-364-3288 Lana.Glover@essentiahealth.org
Essentia Health 705 Pleasant Ave Park Rapids, MN 56470	Kim Berghuis Kim.berghuis@essentiahealth.org 218-732-2828	Rachel Skoog RT (R) Rachel.skoog@essentiahealth.org 218-732-2908
Essentia Health St Mary's 1027 Washington Avenue Detroit Lakes, MN 56501	Kayla Olson RT (R) Radiology Manager 218-847-0811 Kayla.olson@essentiahealth.org	Melissa Watson (R)(CT)(MR) Sarah Buhr RT (R) Sarah.Buhr@essentiahealth.org Melissa.Watson@essentiahealth.org 218-847-0811
Glacial Ridge Health System 10 4th Str. SE Glenwood, MN 56334	Amanda Kath, RT (R)(M) 320-634-4521 amanda.kath@glacialridge.org Fax: 320-634-2005	Position Open 320-634-4521 xray@glacialridge.org
Hennepin County Medical Center Department of Radiology-P4 701 Park Avenue Minneapolis, MN 55415 Department # - 612-873-2771	Denise Taber 612-873-2144 Denise.Taber@hcmed.org	Ericka Zavada RT.(R) Ericka.Zavada@hcmed.org Angela Harri RT (R) Angela.Harri@hcmed.org 612-260-1660
Lake Region Healthcare Corporation 712 South Cascade Street Fergus Falls, MN 56537	Scott Thomas Radiology Director 218 736-8265 sathomas@lrch.org	Janet Larson RT (R) jmlarson@lrhc.org 218-736-8341
Lakewood Health System 49725 County 83 Staples, MN 56479	Diane Lehner, RT (R) Radiology Manager 218-894-8814 Diane.Lehner@lakewoodhealth.system.com	Lee Current RT (R) leecurrent@lakewoodhealthsystem.com 218-894-1515
CHI Lisbon Health 905 Main Street Lisbon, ND 58054	Tiera Opatz RT (R) TieraOpatz@catholichealth.net (701) 683-6406	Tiera Opatz RT (R) TieraOpatz@catholichealth.net (701) 683-6406
Perham Health 1000 Coney Str W Perham, MN 56573	Pat Sjolie/Director of Diagnostic Services Tara Nelson/Imaging Coordinator RT (R)(M)(CT) Tara.Nelson@sanfordhealth.org 218-346-4500	Melaine Johnson RT (R)(CT) Melaine.Johnson@SanfordHealth.org 218-347-1375 218-347-1377 (Fax)
Alexandria Clinic 610 30th Ave West Alexandria MN 56308	Lindsey Sweep RT(R) Radiology Administrator lsweep@alomerehealth.com (320) 759-4012	Lisa Stark RT (R) lstark@alomerehealth.com 320-759-4011
Sanford Health Bemidji 1233 34th Street NW Bemidji, MN 56601	JoAnn Kelsey, MBA, RT (R)(M)(CT)(QM) Director of Imaging 218-333-5478	Angela Bjerknes RT (R) (CT) Angela.Bjerknes@SanfordHealth.org 218-333-5588

Radiologic Technology Health Facility Partners & Clinical Education Sites – JRC Approved Minnesota State Community and Technical College – Detroit Lakes		
The following health care organizations provide students with clinical rotation facilities and instructors. Students may rotate through any of the listed facilities during the 27 months of the program.		
Health Care Facility/Address	**Department Manager**	**Clinical Instructor (CI)**
	218-759-2492 joann.kelsey@sanfordhealth.org	Rebecca Meisner Rebecca.Meisner@SanfordHealth.org 218-333-5439
Sanford Health 520 Chautauga Blvd Valley City, ND 58072	Wendy Hager Regional Director 701-845-6122 Wendy.Hager@Sanfordhealth.org	Jillian Haseleu RT (R)(M) Jillian.Haseleu@sanfordhealth.org 701-845-6111
CHI St Joseph's 600 Pleasant Avenue South Park Rapids, MN 56470	Arlene Copp Department Manager 218.732.3311 arlenecopp@catholichealth.net	Kyle Henry Kylehenry@catholichealth.net 218-255-3045
Tri County Hospital 415 Jefferson St North Wadena, MN 56482	Kate Lachowitzer B.S.R.S. R.T.(R)(CT)(M) Diagnostic Imaging Manager Tri-County Health Care 415 Jefferson Street N · Wadena, MN 56482 218-631-7466 kate.lachowitzer@tchc.org	Shonna Melchior shonna.melchior@tricountyhospital.org 218-631-7466
Veterans Affairs Medical Center 2101 Elm Str. N. Fargo, ND 58102	Ryan Weiser, B.S. RT (R)(CT)(MR) 701-239-3700 Ext. 93209 Pager system - #5, Pager- #701 Ryan.Weiser@va.gov	Dave Jacobsen david.jacobsen@va.gov Aaron Wohlenhaus Aaron.Wohlenhaus@va.gov 701-239-3700 Ext. 93226
Program Director Ann Bell-Pfeifer, M.S. RT(R)(M)(QM) MSCTC- Detroit Lakes 900 Highway 34 East Detroit Lakes MN 56501 Ann.Bell-Pfeifer@minnesota.edu 1-800-450-3322/218-846-3740	Clinical Coordinator Amy Coley, B.S. RT (R)(T) MSCTC – Detroit Lakes 900 Highway 34 East Detroit Lakes, MN 56501 Amy.coley@minnesota.edu 1-800-450-3322/218-846-3735	Program Faculty Colleen Brady-Santwire, M.S. RT(R)(M) MSCTC- Detroit Lakes 900 Highway 34 East Detroit Lakes MN 56501 colleen.brady-santwire@minnesota.edu 1-800-450-3322/218-846-3741

II. Mission Statement, Philosophy, Goals and Student Learner Outcomes

MISSION STATEMENT

The Radiologic Technology program at Minnesota State Community and Technical College is designed to create a rich academic environment using multiple delivery formats and to provide quality didactic and clinical education enhanced with innovative learning strategies which ensure graduates have the required knowledge and skills necessary to begin their careers as entry-level radiologic technologists.

PHILOSOPHY

Radiologic technology is a profession dedicated to assisting radiology and other medical disciplines toward the common goal of alleviating human suffering. A systematic process of education is required for equipping qualified individuals to become competent, contributing members of this profession. This educational process requires correlation of didactic, clinical and laboratory learning into a well-rounded, understandable and rewarding process. It must provide opportunities for acquiring personal competencies as well as understanding of the overall responsibilities of providing health care services. The personnel associated with this program are dedicated to assisting qualified individuals to become competent, capable and caring members of this profession.

GOALS

GOAL 1

Graduates will have entry-level skills for employment in radiologic technology.

- Practice radiation protection for patient, self and others by applying the concepts of ALARA.
- Apply positioning skills.
- Demonstrate patient care skills.

GOAL 2

Graduate students who use problem solving and critical thinking skills to produce quality images.

- Exercise independent judgment in areas of exposure factor manipulations involving all technical factors and equipment for procedures routinely performed in the clinical setting.
- Evaluate radiographs for appropriate anatomy positioning and image quality.

GOAL 3

Graduate students with professional and life-long learning attitudes.

- Conduct him/herself in a professional manner and abide by the Code of Ethics as outlined by the ASRT/ARRT.
- Evaluate the value of professional advancements.

GOAL 4

Graduate students who possess and demonstrate effective communication skills.

- Communicate effectively in both medical and professional relationships.

Program Effectiveness Goals

- Graduate from a Joint Review Committee on Education in Radiologic Technology (JRCERT) accredited program.
- Possess the knowledge and skills employers seek to hire.

MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM
LEARNER OUTCOMES - DETROIT LAKES CAMPUS

The following student learning outcomes are specific program outcomes which are expressed in the program goals. These outcomes are assessed through graduate and employer surveys on an annual basis. These outcomes are specific to the courses taught within the 27-month program.

Graduates of the Radiologic Technology program will:

1. **Communicate effectively in both medical and professional relationships.**
   a. Treat all patients with compassion and empathy.
   b. Adapt to individual diversities.
   c. Use effective and correct verbal and written communication.
   d. Receive, organize, prioritize and transmit information.
   e. Recognize and respond to verbal and nonverbal communications.
   f. Adapt communications to an individual's ability to understand.
   g. Use medical terminology effectively.

2. **Demonstrate patient care skills.**
   a. Provide instructions to patients, families and other health care providers.
   b. Communicate with patients, staff and physicians in a polite and respectful manner.

3. **Apply positioning skills.**
   a. Properly position patients for routine exams.
   b. Assess patient's condition and determine when an adjustment from routine guidelines is necessary.
   c. Use appropriate devices to aid in positioning.
   d. Demonstrate confidence in his/her clinical skills.

4. **Exercise independent judgment in areas of exposure factor manipulations involving all technical factors and equipment for procedures routinely performed in the clinical setting.**
   a. Demonstrate an understanding of the difference between AEC and manual techniques.
   b. Comprehend and apply knowledge of different image receptor types, grid/non-grid techniques when selecting exposure factors.
   c. Comprehend and apply knowledge of how distance affects exposure factors.

5. **Evaluate radiographs for appropriate anatomy, positioning and image quality.**
   a. Take pride in producing high-quality radiographs.
   b. Identify when technical factors necessitate a repeat exam.

c. Demonstrate the ability to manipulate exposure factors appropriately.
d. Identify when positioning is inadequate. Correct positioning by making necessary adjustments to produce a quality image.

6. **Conduct him/herself in a professional manner and abide by the Code of Ethics as outlined by the ASRT/ARRT.**
   a. Wear required uniform including name tag and rad badge, and be neat in appearance.
   b. Demonstrate a desire for success and accept constructive criticism.
   c. Follow federal, state and local legal guidelines.
   d. Comply with risk management and safety procedures.
   e. Maintain confidentiality.
   f. Uphold high ethical standards.

7. **Practice radiation protection for patients, self and others by applying the concepts of ALARA.**
   a. Use gonadal shielding when appropriate.
   b. Inquire of possible pregnancy when appropriate.
   c. Use collimation when possible.
   d. Provide/wear protective lead apparel when appropriate.

8. **Evaluate the value of professional advancements.**
   a. Recognize professional credentialing criteria.

9. **Graduate from a Joint Review Committee on Education in Radiologic Technology accredited program.**
   a. See all previous indicators.

10. **Possess the knowledge and skills employers seek in hiring qualified radiologic technologists.**
    a. See all previous indicators.

AMERICAN SOCIETY OF RADIOLOGIC TECHNOLOGISTS

CODE OF ETHICS

- The radiologic technologist conducts himself or herself in a professional manner, responds to patient needs and supports colleagues and associates in providing quality patient care.

- The radiologic technologist acts to advance the principal objective of the profession to provide services to humanity with full respect for the dignity of mankind.

- The radiologic technologist delivers patient care and service unrestricted by concerns of personal attributes or the nature of the disease or illness, and without discrimination on the basis of sex, race, creed, religion or socio-economic status.

- The radiologic technologist practices technology founded upon theoretical knowledge and concepts, uses equipment and accessories consistent with the purpose for which they were designed, and employs procedures and techniques appropriately.

- The radiologic technologist assesses situations; exercises care, discretion and judgment; assumes responsibility for professional decisions; and acts in the best interest of the patient.

- The radiologic technologist acts as an agent through observation and communication to obtain pertinent information for the physician to aid in the diagnosis and treatment of the patient and recognizes that interpretation and diagnosis are outside the scope of practice for the profession.

- The radiologic technologist uses equipment and accessories, employs techniques and procedures, performs services in accordance with an accepted standard of practice and demonstrates expertise in minimizing radiation exposure to the patient, self and other members of the health care team.

- The radiologic technologist practices ethical conduct appropriate to the profession and protects the patient’s right to quality radiologic technology care.

- 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.

- The radiologic technologist continually strives to improve knowledge and skills by participating in continuing education and professional activities, sharing knowledge with colleagues and investigating new aspects of professional practice.

THE AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGISTS®

ARRT STANDARDS OF ETHICS

Last Revised: September 1, 2017

Published: September 1, 2017

PREAMBLE

The *Standards of Ethics* of The American Registry of Radiologic Technologists (ARRT) shall apply solely to persons holding certificates from ARRT that are either currently certified and registered by ARRT or that were formerly certified and registered by ARRT (collectively, "Certificate Holders"), and to persons applying for certification and registration by ARRT in order to become Certificate Holders ("Candidates"). Radiologic Technology is an umbrella term that is inclusive of the disciplines of radiography, nuclear medicine technology, radiation therapy, cardiovascular-interventional radiography, mammography, computed tomography, magnetic resonance imaging, quality management, sonography, bone densitometry, vascular sonography, cardiac-interventional radiography, vascular-interventional radiography, breast sonography, and radiologist assistant. The *Standards of Ethics* are intended to be consistent with the Mission Statement of ARRT, and to promote the goals set forth in the Mission Statement.

STATEMENT OF PURPOSE

The purpose of the ethics requirements is to identify individuals who have internalized a set of professional values that cause one to act in the best interests of patients. This internalization of professional values and the resulting behavior is one element of ARRT's definition of what it means to be qualified. Exhibiting certain behaviors as documented in the *Standards of Ethics* is evidence of the possible lack of appropriate professional values.

The *Standards of Ethics* provides proactive guidance on what it means to be qualified and to motivate and promote a culture of ethical behavior within the profession. The ethics requirements support ARRT's mission of promoting high standards of patient care by removing or restricting the use of the credential by those who exhibit behavior inconsistent with the requirements.

A. CODE OF ETHICS

The Code of Ethics forms the first part of the *Standards of Ethics.* The Code of Ethics shall serve as a guide by which Certificate Holders and Candidates may evaluate their professional conduct as it relates to patients, healthcare consumers, employers, colleagues, and other members of the healthcare team. The Code of Ethics is intended to assist Certificate Holders and Candidates in maintaining a high level of ethical conduct and in providing for the protection, safety, and comfort of patients. The Code of Ethics is aspirational.

1. The radiologic technologist acts 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 of 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 on the basis of sex, race, creed, religion, or socio-economic status.

4. The radiologic technologist practices technology founded upon theoretical knowledge and concepts, uses equipment and accessories consistent with the purposes for which they were 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 for the physician to aid in the diagnosis and treatment of the patient and recognizes that interpretation and diagnosis are outside the scope of practice for the profession.

7. The radiologic technologist uses equipment and accessories, employs techniques and procedures, performs services in accordance with an accepted standard of practice, and demonstrates expertise in minimizing radiation exposure to the patient, self, and other 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 continuing education and professional activities, sharing knowledge with colleagues, and investigating new aspects of professional practice.

B. RULES OF ETHICS

The Rules of Ethics form the second part of the *Standards of Ethics.* They are mandatory standards of minimally acceptable professional conduct for all Certificate Holders and Candidates. Certification and Registration are methods of assuring the medical community and the public that an individual is qualified to practice within the profession. Because the public relies on certificates and registrations issued by ARRT, it is essential that Certificate Holders and Candidates act consistently with these Rules of Ethics. These Rules of Ethics are intended to promote the protection, safety, and comfort of patients. The Rules of Ethics are enforceable. R.T.s are required to notify ARRT of any ethics violation, including state licensing issues and criminal charges and convictions, within 30 days of the

occurrence or during their annual renewal of certification and registration, whichever comes first. Applicants for certification and registration are required to notify ARRT of any ethics violation, including state licensing issues and criminal charges and convictions, within 30 days of the occurrence.

Certificate Holders and Candidates engaging in any of the following conduct or activities, or who permit the occurrence of the following conduct or activities with respect to them, have violated the Rules of Ethics and are subject to sanctions as described hereunder:

The titles and headings are for convenience only, and shall not be used to limit, alter or interpret the language of any Rule.

Fraud or Deceptive Practices

Fraud Involving Certification and Registration

1. Employing fraud or deceit in procuring or attempting to procure, maintain, renew, or obtain or reinstate certification and registration as issued by ARRT; employment in radiologic technology; or a state permit, license, or registration certificate to practice radiologic technology. This includes altering in any respect any document issued by ARRT or any state or federal agency, or by indicating in writing certification and registration with ARRT when that is not the case.

Fraudulent Communication Regarding Credentials

2. Engaging in false, fraudulent, deceptive, or misleading communications to any person regarding the individual's education, training, credentials, experience, or qualifications, or the status of the individual's state permit, license, or registration certificate in radiologic technology or certificate of registration with ARRT.

Fraudulent Billing Practices

3. Knowingly engaging or assisting any person to engage in, or otherwise participating in, abusive or fraudulent billing practices, including violations of federal Medicare and Medicaid laws or state medical assistance laws.

Subversion

Examination / CQR Subversion

4. Subverting or attempting to subvert ARRT's examination process, and/or the structured self-assessments that are part of the Continuing Qualifications Requirements (CQR) process. Conduct that subverts or attempts to subvert ARRT's examination and/or CQR assessment process includes, but is not limited to:

   (i) disclosing examination and/or CQR assessment information using language that is substantially similar to that used in questions and/or answers from ARRT examinations and/or CQR assessments when such information is gained as a direct result of having been an examinee or a participant in a CQR assessment or having communicated with an examinee or a CQR participant; this includes, but is not limited to, disclosures to students in educational programs, graduates of educational programs, educators, anyone else involved in the preparation of Candidates to sit for the examinations, or CQR participants; and/or

   (ii) soliciting and/or receiving examination and/or CQR assessment information that uses language that is substantially similar to that used in questions and/or answers on ARRT examinations or CQR assessments from an examinee, or a CQR participant, whether requested or not; and/or

   (iii) copying, publishing, reconstructing (whether by memory or otherwise), reproducing or transmitting any portion of examination and/or CQR assessment materials by any means, verbal or written, electronic or mechanical, without the prior express written permission of ARRT or using professional, paid or repeat examination takers and/or CQR assessment participants, or any other individual for the purpose of reconstructing any portion of examination and/or CQR assessment materials; and/or

   (iv) using or purporting to use any portion of examination and/or CQR assessment materials that were obtained improperly or without authorization for the purpose of instructing or preparing any Candidate for examination or participant for CQR assessment; and/or

   (v) selling or offering to sell, buying or offering to buy, or distributing or offering to distribute any portion of examination and/or CQR assessment materials without authorization; and/or

   (vi) removing or attempting to remove examination and/or CQR assessment materials from an examination or assessment room; and/or

   (vii) having unauthorized possession of any portion of or information concerning a future, current, or previously administered examination or CQR assessment of ARRT; and/or

   (viii) disclosing what purports to be, or what you claim to be, or under all circumstances is likely to be understood by the recipient as, any portion of or "inside" information concerning any portion of a future, current, or previously administered examination or CQR assessment of ARRT; and/or

   (ix) communicating with another individual during administration of the examination or CQR assessment for the purpose of giving or receiving help in answering examination or CQR assessment questions, copying another Candidate's, or CQR participant's answers, permitting another Candidate or a CQR participant to copy one's answers, or possessing unauthorized materials including, but not limited to, notes; and/or

   (x) impersonating a Candidate, or a CQR participant, or permitting an impersonator to take or attempt to take the examination or CQR assessment on one's own behalf; and/or

   (xi) using any other means that potentially alters the results of the examination or CQR assessment such that the results may not accurately represent the professional knowledge base of a Candidate, or a CQR participant.

CE Subversion

5. Subverting, attempting to subvert, or aiding others to subvert or attempt to subvert ARRT's *Continuing Education (CE) Requirements,* and/or ARRT's Continuing Qualifications Requirements (CQR). Conduct that subverts or attempts to subvert ARRT's CE or CQR Requirements includes, but is not limited to:

   (i) providing false, inaccurate, altered, or deceptive

information related to CE or CQR activities to ARRT or an ARRT recognized record keeper; and/or

(ii) assisting others to provide false, inaccurate, altered, or deceptive information related to CE or CQR activities to ARRT or an ARRT recognized recordkeeper; and/or

(iii) conduct that results or could result in a false or deceptive report of CE or CQR completion; and/or(iv) conduct that in any way compromises the integrity of the CE or CQR Requirements such as sharing answers to the post-tests or self-learning activities, providing or using false certificates of participation, or verifying credits that were not earned.

Failure to Cooperate with ARRT Investigation

6. Subverting or attempting to subvert ARRT's certification and registration processes by:
   (i) making a false statement or knowingly providing false information to ARRT; or
   (ii) failing to cooperate with any investigation by ARRT.

Unprofessional Conduct

Failure to Conform to Minimal Acceptable Standards

7. Engaging in unprofessional conduct, including, but not limited to:
   (i) a departure from or failure to conform to applicable federal, state, or local governmental rules regarding radiologic technology practice or scope of practice; or, if no such rule exists, to the minimal standards of acceptable and prevailing radiologic technology practice;
   (ii) any radiologic technology practice that may create unnecessary danger to a patient's life, health, or safety. Actual injury to a patient or the public need not be established under this clause.

Sexual Misconduct

8. Engaging in conduct with a patient that is sexual or may reasonably be interpreted by the patient as sexual, or in any verbal behavior that is seductive or sexually demeaning to a patient; or engaging in sexual exploitation of a patient or former patient. This also applies to any unwanted sexual behavior, verbal or otherwise.

Unethical Conduct

9. Engaging in any unethical conduct, including, but not limited to, conduct likely to deceive, defraud, or harm the public; or demonstrating a willful or careless disregard for the health, welfare, or safety of a patient. Actual injury need not be established under this clause.

Scope of Practice

Technical Incompetence

10. Performing procedures which the individual is not competent to perform through appropriate training and/or education or experience unless assisted or personally supervised by someone who is competent (through training and/or education or experience).

Improper Supervision in Practice

11. Knowingly assisting, advising, or allowing a person without a current and appropriate state permit, license, registration, or an ARRT registered certificate to engage in the practice of radiologic technology, in a jurisdiction that mandates such requirements.

Improper Delegation or Acceptance of a Function

12. Delegating or accepting the delegation of a radiologic technology function or any other prescribed healthcare function when the delegation or acceptance could reasonably be expected to create an unnecessary danger to a patient's life, health, or safety. Actual injury to a patient need not be established under this clause.

Fitness to Practice

Actual or Potential Inability to Practice

13. Actual or potential inability to practice radiologic technology with reasonable skill and safety to patients by reason of illness; use of alcohol, drugs, chemicals, or any other material; or as a result of any mental or physical condition.

Inability to Practice by Judicial Determination

14. Adjudication as mentally incompetent, mentally ill, chemically dependent, or dangerous to the public, by a court of competent jurisdiction.

Improper Management of Patient Records

False or Deceptive Entries

15. Improper management of patient records, including failure to maintain adequate patient records or to furnish a patient record or report required by law; or making, causing, or permitting anyone to make false, deceptive, or misleading entry in any patient record.

Failure to Protect Confidential Patient Information

16. Revealing a privileged communication from or relating to a former or current patient, except when otherwise required or permitted by law, or viewing, using, releasing, or otherwise failing to adequately protect the security or privacy of confidential patient information.

Knowingly Providing False Information

17. Knowingly providing false or misleading information that is directly related to the care of a former or current patient.

Violation of State or Federal Law or Regulatory Rule

Narcotics or Controlled Substances Law

18. Violating a state or federal narcotics or controlled substance law**,** even if not charged or convicted of a violation of law.

Regulatory Authority or Certification Board Rule

19. Violating a rule adopted by a state or federal regulatory authority or certification board resulting in the individual's professional license, permit, registration or certification being denied, revoked, suspended, placed on probation or a consent agreement or order, voluntarily surrendered, subjected to any conditions, or failing to report to ARRT any of the violations or actions identified in this Rule.

Duty to Report

Failure to Report Violation

21. Knowing of a violation or a probable violation of any Rule of Ethics by any Certificate Holder or Candidate and failing to promptly report in writing the same to ARRT.

Failure to Report Error

22. Failing to immediately report to the Certificate Holder's or Candidate's supervisor information concerning an error made in connection with imaging, treating, or caring for a patient. For purposes of this rule, errors include any departure from the standard of care that reasonably may be considered to be potentially harmful, unethical, or improper (commission). Errors also include behavior that is negligent or should have occurred in connection with a patient's care, but did not (omission). The duty to report under this rule exists whether or not the patient suffered any injury.

C. ADMINISTRATIVE PROCEDURES

These Administrative Procedures provide for the structure and operation of the Ethics Committee; they detail procedures followed by the Ethics Committee and by the Board of Trustees of ARRT in handling challenges raised under the Rules of Ethics, and in handling matters relating to the denial of an application for certification and registration (for reasons other than failure to meet the criteria as stated in Article II, Sections 2.03 and 2.04 of the *Rules and Regulations* of ARRT, in which case, there is no right to a hearing) or the denial of renewal or reinstatement of certification and registration. All Certificate Holders and Candidates are required to comply with these Administrative Procedures. All Certificate Holders and Candidates are expected to conduct themselves in a professional and respectful manner in their interactions with the ARRT Board of Trustees, Ethics Committee and/or staff. Failure to cooperate with the Ethics Committee or the Board of Trustees in a proceeding involving a challenge or ethics review may be considered by the Ethics Committee and by the Board of Trustees according to the same procedures and with the same sanctions as failure to observe the Rules of Ethics.

1. Ethics Committee

(a) Membership and Responsibilities of the Ethics Committee

The President, with the approval of the Board of Trustees, appoints at least three Trustees to serve as members of the Ethics Committee, each such person to serve on the Committee until removed and replaced by the President, with the approval of the Board of Trustees, at any time, with or without cause. The President, with the approval of the Board of Trustees, will also appoint a fourth, alternate member to the Committee. The alternate member will participate on the Committee in the event that one of the members of the Ethics Committee is unable to participate. The Ethics Committee is responsible for: (1) investigating each alleged breach of the Rules of Ethics and determining whether a Certificate Holder or Candidate has failed to observe the Rules of Ethics and determining an appropriate sanction; and (2) periodically assessing the Code of Ethics, Rules of Ethics, and Administrative Procedures and recommending any amendments to the Board of Trustees.

(b) The Chair of the Ethics Committee

The President, with the approval of the Board of Trustees, appoints one member of the Ethics Committee as the Committee's Chair to serve for a term of two years as the principal administrative officer responsible for management of the promulgation, interpretation, and enforcement of the *Standards of Ethics*. The President may remove and replace the Chair of the Committee, with the approval of the Board of Trustees, at any time, with or without cause. The Chair presides at and participates in meetings of the Ethics Committee and is responsible directly and exclusively to the Board of Trustees, using staff, legal counsel, and other resources necessary to fulfill the responsibilities of administering the *Standards of Ethics.*

(c) Preliminary Screening of Potential Violation of the Rules of Ethics

The Chair of the Ethics Committee shall review each alleged violation of the Rules of Ethics that is brought to the attention of the Ethics Committee. If, in the sole discretion of the Chair: (1) there is insufficient information upon which to base a charge of a violation of the Rules of Ethics; or (2) the allegations against the Certificate Holder or Candidate are patently frivolous or inconsequential; or (3) the allegations, if true, would not constitute a violation of the Rules of Ethics, the Chair may summarily dismiss the matter. The Chair may be assisted by staff and/or legal counsel of ARRT. The Chair shall report each such summary dismissal to the Ethics Committee.

(d) Alternative Dispositions

At the Chair's direction and upon request, the Executive Director of ARRT shall have the power to investigate allegations and to enter into negotiations with the Certificate Holder or Candidate regarding the possible settlement of an alleged violation of the Rules of Ethics. The Executive Director may be assisted by staff members and/or legal counsel of ARRT. The Executive Director is not empowered to enter into a binding settlement, but rather may recommend a proposed settlement to the Ethics Committee.

The Ethics Committee may accept the proposed settlement, make a counterproposal to the Certificate Holder or Candidate, or reject the proposed settlement and proceed under these Administrative Procedures. A Certificate Holder or Candidate who voluntarily enters into an Alternative Disposition Agreement agrees to waive all rights set forth in these Administrative Procedures.

(e) Summary Suspensions

If an alleged violation of the Rules of Ethics involves the occurrence, with respect to a Certificate Holder, of an event described in the Rules of Ethics, or any other event that the Ethics Committee determines would, if true, potentially pose harm to the health, safety, or well-being of any patient or the public, then, notwithstanding anything apparently or expressly to the contrary contained in these Administrative Procedures, the Ethics Committee may, without prior notice to the Certificate Holder and without a prior hearing, summarily suspend the certification and registration of the Certificate Holder pending a final determination under these Administrative Procedures with respect to whether the alleged violation of the Rules of Ethics in fact occurred. Within five working days after the Ethics Committee summarily suspends the certification and registration of a Certificate Holder in accordance with this provision, the Ethics Committee shall, by certified mail, return receipt requested, give to the Certificate Holder written notice that describes: (1) the summary suspension; (2) the reason or

reasons for it; and (3) the right of the Certificate Holder to request a hearing with respect to the summary suspension by written notice to the Ethics Committee, which written notice must be received by the Ethics Committee not later than 15 days after the date of the written notice of summary suspension by the Ethics Committee to the Certificate Holder. If the Certificate Holder requests a hearing in a timely manner with respect to the summary suspension, the hearing shall be held before the Ethics Committee or a panel comprised of no fewer than three members of the Ethics Committee as promptly as practicable, but in any event within 30 days after the Ethics Committee's receipt of the Certificate Holder's request for the hearing, unless both the individual and the Ethics Committee agree to a postponement beyond the 30 day period. The Ethics Committee has the absolute discretion to deny any request for a postponement and to proceed to a hearing with or without the participation of the individual. The applicable provisions of Section 2 (Hearings) of these Administrative Procedures shall govern all hearings with respect to summary suspensions, except that neither a determination of the Ethics Committee, in the absence of a timely request for a hearing by the affected Certificate Holder, nor a determination by the Ethics Committee or a panel, following a timely requested hearing, is appealable to the Board of Trustees.

(f) Voluntary Surrender of Credentials

At any time during the ethics review process, the Certificate Holder may request to voluntarily surrender ARRT credentials and accept permanent revocation of ARRT certification and registration. To request a voluntary surrender, the Certificate Holder must complete the Voluntary Credential Surrender and Sanction Agreement form ("Agreement") that is available on the ARRT website at www.arrt.org. The Agreement must be signed by the Certificate Holder, notarized, and submitted to ARRT. The Executive Director of ARRT shall have the authority to receive the request and may be assisted by staff members and/or legal counsel of ARRT. The Executive Director is not empowered to enter into a binding agreement, but rather may recommend a proposed action to the Ethics Committee. The Ethics Committee will then decide whether to accept or deny the request for surrender of credentials. If denied by ARRT, the ethics review will continue according to the *Standards of Ethics*. If accepted by ARRT, the ethics review process will be discontinued, the Certificate Holder agrees to waive all rights set forth in these Administrative Procedures, and a sanction for permanent revocation will be entered against the Certificate Holder.

(g) Civil or Criminal Penalties

Conduct that violates ARRT's Rules of Ethics may also violate applicable state or federal law. In addition to the potential sanctions under the *Standards of Ethics*, ARRT may, without giving prior notice, pursue civil and/or criminal penalties against the Certificate Holder or Candidate.

2. Hearings

Whenever ARRT proposes to take action in respect to the denial of an application for certification and registration (for reasons other than failure to meet the criteria as stated in Article II, Sections 2.03 and 2.04 of the *Rules and Regulations* of ARRT, in which case there is no right to a hearing) or of an application for renewal or reinstatement of certification and registration, or in connection with the revocation or suspension of certification and registration, or the censure of a Certificate Holder or Candidate for an alleged violation of the Rules of Ethics, it shall give written notice thereof to such person, specifying the reasons for such proposed action. A Certificate Holder or Candidate to whom such notice is given shall have 30 days from the date the notice of such proposed action is mailed to make a written request for a hearing. The written request for a hearing must be accompanied by a nonrefundable hearing fee in the amount of $100. In rare cases, the hearing fee may be waived, in whole or in part, at the sole discretion of the Ethics Committee.

Failure to make a written request for a hearing and to remit the hearing fee (unless the hearing fee is waived in writing by ARRT) within such period or submission of a properly executed Hearing Waiver form within such period shall constitute consent to the action taken by the Ethics Committee or the Board of Trustees pursuant to such notice. A Certificate Holder or Candidate who requests a hearing in the manner prescribed above shall advise the Ethics Committee of the intention to appear at the hearing. A Certificate Holder or Candidate who requests a hearing may elect to appear in person, via teleconference, or by a written submission which shall be verified or acknowledged under oath.

A Certificate Holder or Candidate may waive the 30 day timeframe to request a hearing. To request a waiver of the 30 day timeframe, the Certificate Holder or Candidate must complete a Hearing Waiver form that is available on the ARRT website at www.arrt.org. The Hearing Waiver form must be signed by the Certificate Holder or Candidate, notarized, and submitted to ARRT. The Executive Director of ARRT shall have the authority to receive, administer, and grant the Hearing Waiver form and may be assisted by staff members and/or legal counsel of ARRT.

Failure to appear at the hearing in person or via teleconference, or to supply a written submission in response to the charges shall be deemed a default on the merits and shall be deemed consent to whatever action or disciplinary measures that the Ethics Committee determines to take. Hearings shall be held at such date, time, and place as shall be designated by the Ethics Committee or the Executive Director. The Certificate Holder or Candidate shall be given at least 30 days' notice of the date, time, and place of the hearing. The hearing is conducted by the Ethics Committee with any three or more of its members participating, other than any member of the Ethics Committee whose professional activities are conducted at a location in the approximate area of the Certificate Holder or Candidate in question. In the event of such disqualification, the President may appoint a Trustee to serve on the Ethics Committee for the sole purpose of participating in the hearing and rendering a decision. At the hearing, ARRT shall present the charges against the Certificate Holder or Candidate in question, and the facts and evidence of ARRT in respect to the basis or bases for the proposed action or disciplinary measure. The Ethics Committee may be assisted by legal counsel. The Certificate Holder or Candidate in question, by legal counsel or other representative (at the sole expense of the Certificate Holder or Candidate in question), shall have the right to call witnesses, present testimony, and be heard in the Certificate Holder's or Candidate's own defense; to

hear the testimony of and to cross-examine any witnesses appearing at such hearing; and to present such other evidence or testimony as the Ethics Committee shall deem appropriate to do substantial justice. Any information may be considered that is relevant or potentially relevant. The Ethics Committee shall not be bound by any state or federal rules of evidence. The Certificate Holder or Candidate in question shall have the right to submit a written statement at the close of the hearing. A transcript or an audio recording of the hearing testimony is made for in person and teleconference hearings only. Ethics Committee deliberations are not recorded.

In the case where ARRT proposes to take action in respect to the denial of an application for certification and registration (for reasons other than failure to meet the criteria as stated in Article II, Sections 2.03 and 2.04 of the *Rules and Regulations* of ARRT) or the denial of renewal or reinstatement of certification and registration, the Ethics Committee shall assess the evidence presented at the hearing and make its decision accordingly, and shall prepare written findings of fact and its determination as to whether grounds exist for the denial of an application for certification and registration or renewal or reinstatement of certification and registration, and shall promptly transmit the same to the Board of Trustees and to the Certificate Holder or Candidate in question.

In the case of alleged violations of the Rules of Ethics by a Certificate Holder or Candidate, the Ethics Committee shall assess the evidence presented at the hearing and make its decision accordingly, and shall prepare written findings of fact and its determination as to whether there has been a violation of the Rules of Ethics and, if so, the appropriate sanction, and shall promptly transmit the same to the Board of Trustees and to the Certificate Holder or Candidate in question. Potential sanctions include denial of renewal or reinstatement of certification and registration with ARRT, revocation or suspension of certification and registration with ARRT, or the public or private reprimand of a Certificate Holder or Candidate. Unless a timely appeal from any findings of fact and determination by the Ethics Committee is taken to the Board of Trustees in accordance with Section 3 below (Appeals), the Ethics Committee's findings of fact and determination in any matter (including the specified sanction) shall be final and binding upon the Certificate Holder or Candidate in question.

3. Appeals

Except as otherwise noted in these Administrative Procedures, the Certificate Holder or Candidate may appeal any decision of the Ethics Committee to the Board of Trustees by submitting a written request for an appeal within 30 days after the decision of the Ethics Committee is mailed. The written request for an appeal must be accompanied by a nonrefundable appeal fee in the amount of $250. In rare cases, the appeal fee may be waived, in whole or in part, at the sole discretion of the Ethics Committee.

Failure to make a written request for an appeal and to remit the appeal fee (unless the appeal fee is waived in writing by ARRT) within such period or submission of a properly executed Appeal Waiver form within such period shall constitute consent to the action taken by the Ethics Committee or Board of Trustees pursuant to such notice.

A Certificate Holder or Candidate may waive the 30 day timeframe to request an appeal. To request a waiver of the 30 day timeframe, the Certificate Holder or Candidate must complete an Appeal Waiver form that is available on the ARRT website at www.arrt.org. The Appeal Waiver form must be signed by the Certificate Holder or Candidate, notarized, and submitted to ARRT. The Executive Director of ARRT shall have the authority to receive, administer, and grant the Appeal Waiver form and may be assisted by staff members and/or legal counsel of ARRT.

In the event of an appeal, those Trustees who participated in the hearing of the Ethics Committee shall not participate in the appeal. The remaining members of the Board of Trustees shall consider the decision of the Ethics Committee, the files and records of ARRT applicable to the case at issue, and any written appellate submission of the Certificate Holder or Candidate in question, and shall determine whether to affirm or to modify the decision of the Ethics Committee or to remand the matter to the Ethics Committee for further consideration. In making such determination to affirm or to modify, findings of fact made by the Ethics Committee shall be conclusive if supported by any evidence. The Board of Trustees may grant re-hearings, hear additional evidence, or request that ARRT or the Certificate Holder or Candidate in question provide additional information in such manner, on such issues, and within such time as it may prescribe. All hearings and appeals provided for herein shall be private at all stages. It shall be considered an act of professional misconduct for any Certificate Holder or Candidate to make an unauthorized publication or revelation of the same, except to the Certificate Holder's or Candidate's attorney or other representative, immediate superior, or employer.

4. Publication of Adverse Decisions

Summary suspensions and final decisions (other than private reprimands) that are adverse to the Certificate Holder or Candidate will be communicated to the appropriate authorities of certification organizations and state licensing agencies and provided in response to written inquiries into an individual's certification and registration status. The ARRT shall also have the right to publish any final adverse decisions and summary suspensions and the reasons therefore. For purposes of this paragraph, a "final decision" means and includes: a determination of the Ethics Committee relating to an adverse decision if the affected Certificate Holder or Candidate does not request a hearing in a timely manner; a non-appealable decision of the Ethics Committee; an appealable decision of the Ethics Committee from which no timely appeal is taken; and, the decision of the Board of Trustees in a case involving an appeal of an appealable decision of the Ethics Committee.

5. Procedure to Request Removal of a Sanction

A sanction imposed by ARRT, including a sanction specified in a Settlement Agreement, specifically provides a sanction time frame and it shall be presumed that a sanction may only be reconsidered after the time frame has elapsed. At any point after a sanction first becomes eligible for reconsideration, the individual may submit a written

request (“Request”) to ARRT asking the Ethics Committee to remove the sanction. The Request must be accompanied by a nonrefundable fee in the amount of $250. A Request that is not accompanied by the fee will be returned to the individual and will not be considered. In rare cases, the fee may be waived, in whole or in part, at the sole discretion of the Ethics Committee. The individual is not entitled to make a personal appearance before the Ethics Committee in connection with a Request to remove a sanction or to modify a Settlement Agreement.

Although there is no required format, Requests for both sanction removal and Settlement Agreement modification must include compelling reasons justifying the removal of the sanction or modification of the Settlement Agreement. It is recommended that the individual demonstrate at least the following: (1) an understanding of the reasons for the sanction; (2) an understanding of why the action leading to the sanction was felt to warrant the sanction imposed; and (3) detailed information demonstrating that the Certificate Holder’s or Candidate’s behavior has improved and similar activities will not be repeated. Letters of recommendation from individuals, who are knowledgeable about the person’s sanction imposed; and current character and behavior, including efforts at rehabilitation, are advised. If a letter of recommendation is not on original letterhead or is not duly notarized, the Ethics Committee shall have the discretion to ignore that letter of recommendation.

Removal of the sanction is a prerequisite to apply for certification and registration. If, at the sole discretion of the Ethics Committee, the sanction is removed, the individual will be allowed to pursue certification and registration via the policies and procedures in place at that time as stated in Section 6.05 of the *ARRT Rules and Regulations.*

If the Ethics Committee denies a Request for removal of the sanction or modification of a Settlement Agreement, the decision is not subject to a hearing or to an appeal, and the Committee will not reconsider removal of the sanction or modification of the Settlement Agreement for as long as is directed by the Committee.

6. Amendments to the Standards of Ethics

The ARRT reserves the right to amend the *Standards of Ethics* following the procedures under Article XI, Section 11.02 of the *ARRT Rules and Regulations.*

III. PROGRAM OVERVIEW

The Radiologic Technology program is seven semesters or 27 months in length. The Associate of Applied Science degree with a major in Radiologic Technology is awarded upon completion of the 79 semester credit curriculum. With the completion of the program, students are eligible for the National Registry Exam for Radiologic Technologists. Success in passing this exam brings students to a *Registered Radiologic Technologist* status.

Minnesota State Community and Technical College has a policy for advanced placement of students. The student makes application for advanced standing with the office of admissions. The student must provide official transcripts to validate previous educational experience. Program officials evaluate each application for advanced standing prior to enrollment of the student in a given semester. Students are notified if the previous educational experience is deemed to meet requirements. They will be notified if exemption from that course work is applicable.

Didactic classes begin fall semester and clinical instruction begins summer semester. Students are given a didactic/clinical schedule at the beginning of each semester.

Graduation (Degree) Requirements:

Upon successful completion of the program requirements, the graduate will be awarded an Associate of Applied Science degree. The program requirements for graduation are as follows:

1. The student must achieve a grade of 2.0 or above in each course comprising the curriculum of the program.
2. The student must obtain a satisfactory rating on all semester weekly behavioral evaluations.
3. The student must achieve a satisfactory rating on all clinical competency evaluations.
4. The student must complete an average of 1,400 clinical hours. This is subject to slight change.
5. The student must complete clinical performance objectives.

The competencies required of each graduate of the Radiologic Technology program are designed to comply with the Clinical Competency Requirements Adopted by the American Registry of Radiologic Technologists.

The program plan is listed on the following page.

RADIOLOGIC TECHNOLOGY
ASSOCIATE OF APPLIED SCIENCE (AAS) - 79 CREDITS

Program Plan — "Primary"
Locations: Detroit Lakes

(18 credits)

Courses

Course #	Course title	Crds
BIOL2260	Human Anatomy and Physiology I	3
COMM1140	Interpersonal Communication	3
MATH1114	College Algebra	4
PHYS1105	Fundamental Concepts in Physics	3
BIOL2262	Human Anatomy and Physiology II	3
RADT1102	Fundamental Concepts of Radiologic Technology	2

1st Fall Term (13 credits)

Courses

Course #	Course title	Crds
RADT1112	Introduction to Radiologic Technology and Patient Care	4
RADT1116	Radiographic Procedures I	5
RADT1124	Radiographic Procedures II	4

1st Spring Term (12 credits)

Courses

Course #	Course title	Crds
RADT1132	Principles of Radiobiology	4
RADT1140	Radiographic Imaging	4
RADT1146	Radiographic Procedures III	4

1st Summer Term (10 credits)

Courses

Course #	Course title	Crds
RADT1180	Radiographic Clinical I	5
RADT1190	Radiographic Clinical II	5

2nd Fall Term (14 credits)

Courses

Course #	Course title	Crds
RADT2100	Radiographic Clinical III	5
RADT2110	Radiographic Clinical IV	5
RADT2224	Imaging Equipment	4

2nd Spring Term (12 credits)

Courses

Course #	Course title	Crds
RADT2120	Radiographic Clinical V	5
RADT2130	Radiographic Clinical VI	5
RADT2280	Radiologic Technology Registry Review	2

IV. CURRICULUM DESIGN

A. Correlation between didactic and clinical instruction

The primary clinical affiliates of this program are listed in this handbook. These facilities have an adequate number of radiographic rooms and registered technologists on site who ensure students acquire expertise and proficiency in a wide variety of diagnostic radiographic procedures. The application of classroom theory to the actual practice of technical skills is applied to specified levels of competency.

The didactic component of radiographic procedures is taught through lecture, laboratory demonstration and practice. The lecture portion reinforces the anatomy involved with a particular exam and instructs the student in the proper methods of carrying out a particular exam (i.e. the various positions used) and the theory applicable to those positions. The laboratory portion of instruction is used to demonstrate proper methods and positioning, allowing students to practice positioning through role playing and to demonstrate an acceptable level of competence to the instructor in these procedures.

After the student learns a new exam category through didactic instruction and an acceptable level of competence is demonstrated in the lab setting, clinical affiliates are informed that the students can perform the exams in that category under ***direct supervision.*** The Registered Technologist assigned to a room in which a student is assigned monitors that student's conduct. The technologist evaluates the student's clinical competency when an exam is done under his or her supervision. Most exams require a minimum of four competency evaluations before the student can perform those exams under ***indirect supervision.*** The final exam must be error-free to establish clinical competence for that exam. A list of exam categories and the date by which they must be successfully completed is provided in the Clinical Evaluation section of this handbook.

Radiographic imaging is instructed both by lecture and by laboratory demonstration and practice. The lecture component of instruction is used to teach the correct theories and formulas for determining correct exposure factors and for correcting sub-optimal exposure factors. Laboratory instruction is used to demonstrate these theories and formulas as they would apply to clinical situations and to provide students with actual practice and experimentation in the use of these theories and formulas. In the clinical setting, there is virtually constant supervision by the technologists so that image critique and evaluation of the students' performance is continuous and noted. It is a requirement of the clinical affiliation sites that the technologists monitor the exam or review the images produced.

Basic radiation protection measures are taught early in the program as part of Introduction to Radiologic Technology and Patient Care. This is designed to give the students an adequate understanding of the principles for protecting the patient and him/herself and other staff, which allows them to be functional in the clinical setting. A class devoted to radiation biology and protection is included in the curriculum and is instructed in the first spring semester.

B. Competency development

a. A method of competency-based education is utilized. The method is based on cognitive, psychomotor and affective (behavioral) domain instruction.

b. Students are assigned clinical competency categories of radiographic exams, which are intended to be completed in a prescribed period of time. The clinical competency categories are those clinical competency requirements adopted by the ARRT.
c. Competency achievement is noted when a student completes the set number of exams under direct supervision, with the final exam being error-free.
d. Verification of completion of a category will be by an assigned supervisor in the particular area. Competency verification forms used for this purpose are located electronically at www.Trajecsys.com.
e. Prior to completing any clinical category, the student must have completed the anatomy and positioning laboratory and lecture classes associated with the particular category and have attained a minimum grade of C (minimum of 77 percent).
f. The student will perform the designated number of examinations in each competency category under the supervision of a registered technologist.
g. In the 2nd fall semester, students rotate through the specialized areas of nuclear medicine, radiation therapy, computed tomography, MRI, interventional and ultrasound. The supervisor in each specialty area will complete an evaluation on each student.

V. CLINICAL EDUCATION PLAN

A. Rotations

Students rotate on a weekly basis between the fluoroscopic rooms, radiographic rooms, surgery, portables and special procedures. Students also rotate between the clinical affiliates to ensure a wide variety of clinical experiences. Rotations through specialty areas such as radiation oncology, nuclear medicine, medical sonography, magnetic resonance imaging (MRI), CT and interventional are provided the start of a student's second year. The clinical coordinator makes the schedule of clinical site rotations for all students in the program. These rotations generally consist of four-week intervals spent in various clinical sites determined by site type (i.e. hospital or clinic) and exam counts. During each semester students will also spend a four-week rotation consisting of two weeks of a PM (i.e. 1-9 p.m.) rotation and two weeks of a weekend (i.e. Friday, Saturday and Sunday) rotation. Students are provided with a schedule of clinical site rotations approximately one month prior to the start of each semester of the program. The clinical instructors design the student weekly rotations.

B. Objectives

The main clinical objective is for the student to be able to develop job entry-level competencies
in the performance of radiographic procedures and to apply the appropriate theory to the various
clinical situations that might be encountered. Clinical objectives are listed in course outlines for
each clinical radiography class. Special imaging rotation objectives are also identified in clinical
course outlines.

VI. EVALUATION METHODS

A. Didactic

The student's progress in didactic instruction is evaluated with the use of various methods (i.e. written tests, group and individual projects, presentations, etc.) and by laboratory demonstration. Testing is done periodically through the length of each course to determine if students are progressing satisfactorily and at the end of each course to determine terminal competencies. A minimum grade of C (77-84 percent) is required to pass each course and to continue in the program.

B. Clinical

There are core clinical competencies that all individuals must demonstrate to establish eligibility for ARRT certification. The ARRT Clinical Competency Requirement document describes these competency requirements for radiography. The requirements listed are the minimum core clinical competencies necessary to establish eligibility for participation in the ARRT Radiography Examination. ARRT encourages individuals to obtain education and experience beyond these core requirements, which is also the intent of the program.

The students must demonstrate competency in all 37 mandatory Radiological Procedures. At least 29 of the 37 mandatory Radiological Procedure competencies must be demonstrated on patients (not phantom or simulated). The remaining eight mandatory competencies need to be demonstrated; however, these can be demonstrated on patients, phantoms or simulated. Competency demonstration should incorporate patient-specific variations such as age and pathology. Students must demonstrate competency in at least 15 of the 37 elective radiological procedures. Electives may be demonstrated on patients or phantoms or as simulations. Simulations will be done at the end of the last clinical rotation (last week) of the program. In addition to the Radiological Procedure competencies, there are ten mandatory General Patient Care competencies. These competencies may be simulated. Lists of these patient care competencies are included with the procedure competency requirements.

Clinical testing of previously learned procedures will be done in the form of announced and unannounced "spot checks." The purpose of the spot check is to assure that once competency is attained for a particular procedure, it is maintained throughout the educational process and taken with the student into the entry-level position. Students may also be spot checked on exams they have not yet met competency on. This allows students to practice or review the procedure to better assure performance when performing the exam with patients.

The student must realize that, even though becoming competent in producing quality radiographs and assisting with fluoroscopic procedures is crucial, such competence is not the only aspect of the clinical experience that will be evaluated. The student's grade also will be based on total points received on weekly behavioral evaluations. (For a list of behavioral attributes evaluated, refer to the evaluation section and reference the BARS weekly evaluation forms located in this handbook.)

C. Summary of Clinical Grade Components

1. Semester competency assignments
2. BARS weekly evaluations (Behavioral Anchor Rating Scale)

3. Clinical competency spot checks

VI. PROGRESSION STANDARDS

Failure of the student to attain, maintain and abide by any one or more of the following criteria will cause the student to be placed on probation for a period of four weeks. If at the end of this time the student shows no improvement, he/she will be dismissed from the Minnesota State Community and Technical College Radiologic Technology program.

1. Must achieve a grade of 2.0 (C) or above in each and every course required in the program in order to progress.

2. If a student fails to achieve this level in a general education course, the student can repeat the course prior to the August start date, or the student will forfeit his or her spot in the program and will be invited to reapply to the program for the next year.

3. Radiology courses can be repeated if a student receives less than a 2.0 or letter of C. However, the student will be removed from the program at the point where he or she fails to receive a C, and the student has the option of being readmitted the following year at the beginning of the semester in which the course needs to be repeated.

4. The student must obtain a satisfactory rating on all weekly behavioral evaluations.

5. The student must obtain a satisfactory rating on all clinical competency evaluations.

6. The student must be able to perform all motor skills necessary to execute all radiologic examinations.

7. The student must exhibit ethical and professional conduct at all times as outlined in the professional code of ethics.

8. The following violations of ethical and professional conduct by the student will constitute **reason for dismissal:**
    a. Release of confidential information regarding patients and/or personnel from the clinical education settings.
    b. Discourteous treatment of patients, the public, employees or fellow students.
    c. Insubordination which would include disrespect for program officials, affiliated personnel, other students in the program and patients.
    d. Repeated tardiness and/or absenteeism.
    e. Falsification of sick time.
    f. Falsification of any clinical documents including but not limited to time cards, weekly evaluations and clinical competencies.
    g. Dishonesty.
    h. Neglect of duties.
    i. Intoxication.

The administration of the Minnesota State Community and Technical College and the faculty of the program of Radiologic Technology will enforce the above criteria. Students do have the right to appeal decisions as outlined in the College's Student Handbook.

VIII. POLICIES

A. Student Discipline/Termination Policy - 1001

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	7-01	**Effective Date:**	7-01
Review Date:	5-08, 8-09,6-10, 6-11,7-12, 5-13, 12-14, 4-16, 2-18, 6-19	**Revised Date:**	6-08, 12-14, 6-19

Policy:
Minnesota State Community and Technical College (M State) Radiologic Technology Program recognizes the need for high standards, ethical and appropriate behavior demonstrated by the students enrolled in the program. The program requires students to meet minimum grade requirements, academic standards, abide by the American Society of Radiologic Technologists (ASRT) code of ethics, American Registry of Radiologic Technologists (AART), and specific code of conduct standards as outline by M State.

Purpose:
To outline the substandard, unethical and inappropriate conduct that may result in immediate termination from the program.

General Information:
Gross misconduct is defined as behavior which violates the ASRT code of ethics, ARRT standard of ethics, or any behavior which causes harm to patients, fellow students, technologists or faculty.

In preparation for a career in radiologic technology/health care, the program recognizes the success of program graduates will rely on their ability to adhere to the strict standards of health care facilities. The standards the program embraces reflect the values of the ASRT, ARRT, and associated health care clinical sites. The student disciplinary procedure will be initiated due to substandard, unethical or inappropriate student conduct by the program director and/or the clinical coordinator. Failure to adhere to criteria can result in probation, suspension or immediate termination from the program. Immediate termination may result for any one of the following reasons:

1. Any grade lower than a C that prohibits progress into the next course. Future enrollment in that course would follow the program re-entry process on a space available basis.

2. Receiving unsatisfactory rating on student clinical competency evaluations.

3. Receiving unsatisfactory rating on all clinical performance evaluations (weekly evaluations), which are in the form of a behavioral anchor rating system (BARS).

4. Possession or use of alcohol or any mood-altering chemicals on the premises or reporting for class/clinical intoxicated. Random drug and alcohol testing may be done at the student's expense.

5. Repeated tardiness.

6. Unexcused absenteeism (including failure to follow notification of absence procedure as outlined in the attendance policy) and/or falsification of sick time.

7. Insubordination in class or clinical setting.

8. Grossly unethical or unprofessional conduct in class or clinical setting.

9. Gross carelessness in regard to safety of patients or colleagues.

10. Discourteous, unprofessional treatment of patients, public and staff.

11. Dishonesty/cheating/theft.

12. Release of confidential information regarding patients and/or hospital or clinic personnel or activities.

Procedure:

1. **Termination:** Dismissal from the program.
    a. If the situation results in immediate termination from the program the student will be given the opportunity to appeal that decision through the college appeal process outlined in the college student handbook.

2. **Suspension:** Dismissal from the program for a specified time.
    a. If the situation results in suspension from the program the student will be placed on suspension for a specified amount of time. If at the end of this time satisfactory improvement is not demonstrated, the student will be terminated from the program. Students who are suspended will be placed on probation. See the probation policy or readmission policy for reference.

3. **Probation:** Continued enrollment in the program is dependent upon improvement in behavior during a specified period.
    a. If the situation results in the student being placed on probation the student will be required to demonstrate satisfactory improvement. A performance plan will be implemented to monitor improvement. If satisfactory improvement is not demonstrated during this specified time frame further disciplinary actions will be taken.

Radiography Program Probation

Program probation is disciplinary action that may be taken when a student breaches policies of M State, a radiologic technology course, the radiography program, college or industry standards; engages in a critical incident in any radiography course; or demonstrates insubordinate behavior. If the alleged violation occurred in a clinical setting, the Clinical Instructor has the option of removing the student from the clinical setting immediately.

Examples of breach of standards may include, but are not limited to:

- Failure to identify a patient prior to any invasive procedures or high risk patient care activities.
- Breach of patient confidentiality or HIPPA guidelines.
- Unprofessional behavior, plagiarism, or integrity misconduct.
- Violation of the American Registry of Radiologic Technologists (ARRT) code of ethics.

Examples of critical incidents may include, but are not limited to:

- Unsafe practice.
- Practicing without supervision. Practicing outside of the American Society of Radiologic Technologists (ASRT) scope of practice or the ARRT student curriculum.
- Behavior that puts self or others at risk while participating in academic and clinical rotation related activities.

Examples of insubordinate behavior may include, but are not limited to:

- Unruly behavior.
- Noncompliance with any of the following, course or program rules, M State or Radiography policies.
- Tardiness and absenteeism.

Probation Procedure Instructor Responsibilities

1. Instructor includes: (M State faculty or clinical instructor); promptly discusses the incident with the student privately, and determines if the student will be permitted to remain in the classroom, lab, or clinical area.
2. Instructor will communicate expectations to student, document the incident and communication using the Notice of Probation form.
3. Instructor reviews the Notice of Probation with the student, and gives the student the opportunity to provide a description of the situation in an electronic document format that will be attached to the Notice of Probation.
4. Instructor and student sign the Notice of Probation, indicating they have discussed the incident and resulting probationary status including the probationary plan and consequences associated with the student's failure to comply. A copy of the document will be saved in the program archive and given to the student.
5. Faculty will forward the electronic Notice of Probation to the Director of Radiologic Technology for review. Based upon the severity of the incident, the Director of Radiologic Technology may request to meet with the student. If changes are made to the document, the Director of Radiologic Technology will return a copy of the signed Notice of Probation to the instructor and student. These records will be saved indefinitely in the Program files.
6. Terms of the Notice of Probation remain in effect until the student graduates.

7. Probation is also included as part of the readmission process. Refer to the radiologic technology program readmission policy.

Probation Procedure Student Responsibilities

1. Student includes any person enrolled at M State in the Radiography program.
2. Student reviews the probation form with the instructor/director who has been notified of a violation.
3. Student has the opportunity to add a description of the event in an electronic document.
4. Student signs the completed Notice of Probation form, indicating they understand the violation. An electronic copy of the violation will be received by the student.
5. Student has the right to appeal any violation.

Probation Consequences

1. **First Incident**
    a. The **Notice of Probation** form is completed.
    b. The student will be assigned a letter grade of "F" on the exam, assignment, or clinical evaluation, which *may* affect the student's ability to successfully meet course or program outcomes.
    c. The student may continue in the other courses in which (s)he is enrolled, but will be required to submit a Revised Plan of Study.
2. **Second Incident**
    a. The **Notice of Termination** form is completed.
    b. The student will be assigned a letter grade of "F" for the course associated with the incident. The student will be terminated from the program and is ineligible to reapply to the Radiography Program at M State.

Gross Unsafe Practice

Depending on the nature of the incident(s), the student may be immediately removed from the learning environment, awarded a letter grade of "F" for the associated course and possibly dismissed from the program. Examples of incidents that may be cause for immediate removal, course failure and program dismissal include, but are not limited to:

- Incidents where the patient is placed at undue risk and/or experiences a catastrophic injury or sentinel event.
- Incidents where the student breaks the law while engaged in activities related to his/her M State academic endeavors.
- Any incident listed under the critical incidents or insubordinate behavior based on the discretion of the Radiologic Technology program director and Associate Academic Dean.

Students removed from the program for these reasons are ineligible to reapply to the Radiography Program.

References:

ASRT Scope of Practice: https://www.asrt.org/docs/default-source/practice-standards-published/ps_rad.pdf?sfvrsn=13e176d0_18

ARRT Code of Ethics: https://www.arrt.org/docs/default-source/Governing-Documents/code-of-ethics.pdf? sfvrsn=10

Minnesota State Community and Technical College
Radiologic Technology Program
Plan of Action for Written Probation

Refer to the Radiologic Technology Student Handbook disciplinary action policy and probation policy for probation criteria.

This form serves as Plan of Action documentation regarding probation for:

Student Name: _____ Date: _____

The Plan of Action will be in effect for one semester or until deemed necessary by the Radiologic Technology Program Director. All records will be part of the student's permanent record at M State.

Any future violations may result in further disciplinary action up to and including suspension and/or termination.

_____ _____
(Student signature) (Date)

_____ _____
(Program Director signature) (Date)

Minnesota State Community and Technical College
Radiologic Technology Program
Notice of Probation

Refer to the Radiologic Technology Student Handbook disciplinary action policy and probation policy for probation criteria.

Student Name: _____ Date: _____

This form provides documentation of a written warning from the Radiologic Technology program for the following violation:

Any future violations may result in further disciplinary action up to and including suspension and/or termination.

_____ _____
(Student signature) (Date)

_____ _____
(Program Director signature) (Date)

Minnesota State Community and Technical College
Radiologic Technology Program
Notice of Termination

Refer to the Radiologic Technology Student Handbook disciplinary action policy and probation policy for probation criteria.

Student Name: _____ Date: _____

This form provides documentation of termination from the Radiologic Technology Program for the following violation:

_____ _____
(Student signature) (Date)

_____ _____
(Program Director signature) (Date)

B.Student Readmission Policy - 1002

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	02-03-2019	**Effective Date:**	02-03-2019
Review Date:	6-19	**Revised Date:**	6-19

Policy:
Readmission into the Radiologic Technology Program following student withdrawal.

Purpose:
To guide students, faculty and program officials in the process for the potential for readmitting a radiography student.

General Information:
Minnesota State Community and Technical College (M State) Radiologic Technology Program recognizes the need for students to demonstrate high standards, ethical and appropriate behavior, high academic performance, and commitment to didactic and clinical studies.

Procedure:
A candidate for readmission must have successfully completed at least one full semester in the M State Radiologic Technology Program. Students who have not successfully completed a semester must reapply to the program.

1. Re-admission of a student, regardless of reason for withdrawal, is dependent on space availability in the program and cannot be guaranteed to any student unless the withdrawal falls under Title IX of the Education Amendments of 1972 or any withdrawal that falls under a federally or state protected reason.
2. No student who has a cumulative GPA of less than 2.0 will be readmitted to the Radiologic Technology program.
3. Students who have completed less than one semester should reapply to the program. Students will be required to follow current application guidelines and will be selected based on current application guidelines. Requests for readmission are evaluated on an individual basis based on the following:
    a. The reason for their withdrawal.
    b. Length of time since their withdrawal (must be within 1 year), unless the withdrawal falls under Title IX of the Education Amendments of 1972 or any withdrawal that falls under a federally or state protected reason.
    c. Any program related experiences or activities the individual has participated in after withdrawal from the program.
4. The Radiologic Technology Appeals Council (RTAC) reviews appeals related to the radiology program, radiology program policies and program eligibility.
5. A person seeking readmission to the Radiologic Technology program should write a letter of request and appeal to the Associate Dean and Radiologic Technology Program Director by the following dates:
    a. For fall admission the letter must be received no later than February 15th of that year.

b. For spring admission the letter must be received no later than September 15th of that year.

6. The RTAC is comprised of radiology program faculty, two Student Development Services representatives, the Director of Radiology, and the Associate Dean of the program. The council meets as needed during the academic year. The council does not meet when program faculty are not on contract, such as during semester breaks, spring break, holidays, weekends and summer.
7. Students wishing to present their appeal to the council should email council chair Ann.Bell-Pfeifer@minnesota.edu. A meeting will be scheduled according the RTAC council and student availability within 2 weeks of receiving the appeal request. Meetings may occur on campus or online, as needed to facilitate the meeting in a timely manner.
8. Students wishing to submit an appeal to the RTAC will complete the College Appeal Form. Emails will not be accepted as appeals.
9. Students are encouraged to review the entire program progression policy outlined in the Radiology Program Policies and Procedures manual. Decisions are communicated in writing to students using their M State student email account within 10 working days of the scheduled meeting.
10. Appeals must include:
    a. A request for readmission with semester and year of anticipated return to the Radiologic Technology program.
    b. A statement of progress toward degree completion for the M State Radiologic Technology curriculum requirements.
    c. Official transcripts from all significant schools.
    d. A completed M State application to the Radiologic Technology program.
    e. If difficulties were encountered while in the Radiologic Technology program:
        i. Identification of reason(s) why the student withdrew, the changes which have occurred since withdrawing, and applicable documentation which provides evidence of positive change.
        ii. A detailed plan that will support the student's successful completion of the program may include:
            1. Tutoring
            2. Employment in health care
            3. Remedial courses
            4. Recovery program education
            5. Counseling
11. Readmitted students must follow the core admission guidelines (health records, CPR, background checks, etc.) for the Radiologic Technology program.
12. Candidates for readmission may be given a written or psychomotor skill exam to ensure that previous learned knowledge and skills (to include, but not limited to, clinical competencies) were retained. Students who do not pass the skill assessment exams may not be eligible for readmission into the program.
13. Application for readmission does not guarantee student acceptance back into the program. Readmission decisions are based at the discretion of the Radiologic Technology Program Director and Associate Dean.
14. Specific guidelines and expectations will be established by the program director to insure student success and student compliance. Students are considered for readmission only once.
15. Students can appeal decision by following the M State Level II appeals process.

Date: _____

Name: _____

Last semester enrolled: _____

Semester requesting readmission: _____

Radiologic Technology Program Director: _____

Radiologic Technology Program Clinical Coordinator: _____

Program Advisor: _____

Dean of the Radiologic Technology Program: _____

Decision: GRANTED _____ NOT GRANTED _____

Statement of Results:

_____

_____

Minnesota State Community and Technical College
Radiologic Technology Program
Voluntary Withdrawal Form

Student Name: _____ Date: _____

This form provides documentation of voluntary withdrawal from the Radiologic Technology (RT) program at Minnesota State Community and Technical College-Detroit Lakes. Students who withdraw from the program must follow the readmission policy to be considered for continuing education in the RT program. Readmission is not guaranteed.

_____ _____
(Student signature) (Date)

_____ _____
(Program Director signature) (Date)

C. Student Pregnancy Policy - 1101

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	7-01	**Effective Date:**	7-01
Review Date:	5-08, 10-08, 8-09 6-10, 6-11,7-12, 5-13, 12-14, 4-16, 3-17, 4 -18, 08-19	**Revised Date:**	6-08, 10-08

Policy:
Minnesota State Community and Technical College (M State) Radiologic Technology program recognizes ionizing radiation has been determined to be harmful to the developing embryo/fetus. Therefore, in keeping with the ALARA principle, M State shall strive to minimize exposure to the unborn embryo/fetus of pregnant student radiographers.

Purpose:
To describe the actions to be taken by employees, program officials and radiation safety officer to ensure that exposure does not exceed regulatory limits.

General Information:
In accordance with the NRC's regulations at 10 CFR 20.1208 (http://www.nrc.gov/reading-rm/doc-collections/cfr/part020/part020-1208.html) "Dose to an Embryo/Fetus," radiation dose to an embryo/fetus during entire pregnancy will not be allowed to exceed 0.5 rem (5 millisievert) (unless that dose has already been exceeded between the time of conception and submitting letter of declaration).

If the student chooses to disclose her pregnancy, she may do so by informing the program director or clinical coordinator in writing. The form used to disclose pregnancy is located in the program handbook or can be obtained from any program official.

The student and program officials will discuss possible modifications in clinical assignments, leave of absence from clinical assignments, and/or leave of absence from the program. The student also will have the option of continuing the educational program without modification or interruption. The student will be allowed to make an informed decision based on her individual needs and preferences.

The student may withdraw declaration of pregnancy at any time in a written format.

Procedure:
1. In the event the student chooses to disclose her pregnancy in writing:
    a. The student will be given information regarding the effects of radiation on developing embryo/fetus.
    b. The student will also be instructed how to effectively protect herself and the developing embryo/fetus using basic radiation protection principles of time, distance and shielding.
    c. The student will be provided with a fetal monitor throughout the pregnancy term.

i. The fetal monitor will be worn at the waist level at all times
ii. The fetal monitor will be worn underneath lead apparel when appropriate

2. If a student chooses to take a leave of absence from the program, she will be allowed back into the program at the start of the academic semester she was in when she left.
    a. The student may request a leave of absence when either she or her physician feels she is no longer able to function in a manner conducive to learning. Each case will be reviewed individually taking into account not only radiation protection/safety issues, but educational issues as well (for instance loss of clinical experience in fluoroscopy and/or lost class time).
3. If the student chooses to continue in the program without modification she will be required to use CTO for all clinical days missed and she will be required to make up any time missed over the allotted 40 hour CTO. A make-up schedule will be developed through a joint effort between program officials, the student and effected clinical instructors.

Minnesota State Community and Technical College

DECLARATION OF PREGNANCY

To:_____

In accordance with the NRC's regulations at 10 CFR 20.1208, "Dose to an Embryo/Fetus," I am declaring that I am pregnant. I believe I became pregnant in_____ (only the month and year need be provided).

I understand the radiation dose to my embryo/fetus during my entire pregnancy will not be allowed to exceed 0.5 rem (5 millisievert) (unless that dose has already been exceeded between the time of conception and submitting this letter). I also understand that meeting the lower dose limit may require a change in scheduled clinical location or semester competency requirements during my pregnancy.

_____
(Student signature)

_____
(Student name printed)

_____
(Date)

D. Clinical Dress Policy - 1201

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	7-01	**Effective Date:**	7-01
Review Date:	5-08, 8-09, 6-10, 6-11,7-12, 5-13, 4-16, 3-18	**Revised Date:** 08-19	6-08, 12-14

Policy:
Minnesota State Community and Technical College (M State) Radiologic Technology Program recognizes a professional image must be portrayed in the clinical setting.

Purpose:
To describe the actions to be taken by students, program officials and clinical site officials to ensure a professional image is maintained by adherence of the dress code standards.

General Information:
The M State Radiologic Technology Program strongly believes a student's professional image impacts technologists' and patients' perceptions of quality and overall experience with M State Radiologic Technology students. As a student of the program you are an integral part of the image of M State, the clinical site and the radiologic technology profession.

Procedure:

1. Personal hygiene is of the utmost importance. Students will:
    a. Have neatly trimmed fingernails.
    b. Refrain from using extreme hair styles, colors and products.
    c. Be free and aware of strong and offensive odors such as perfumes, colognes, smoke and body odor.
    d. Wear a limited number of rings; generally an engagement ring or wedding band.
    e. Refrain from possessing visible body piercings and tattoos at the affiliated clinical education sites other than conservative earrings for men and women.
    f. Offensive tattoos must be covered while participating in program required activities (e.g. clinical assignment, conferences, etc.). The offensiveness of the tattoo will be determined by program and/or clinical officials.

2. Professional and acceptable attire must be worn. Students:
    a. Will wear clean, comfortable white shoes in good condition with a closed toe.
    b. Will wear the Mstate designated color and brand scrub uniform, whites or a combination thereof. Will wear Current M State photo ID and/or clinical facility ID badge, attached on the chest area of the uniform. Name and picture must be facing forward and visible to patients, families, and staff at all times.
    c. May wear a scrub coat when scrub uniform is the attire.
    d. Will refrain from wearing any clothing with inappropriate or offensive lettering or logos.
    e. May wear a colored top under a lab coat when whites are the attire.
    f. May not wear sweat shirts or sweat pants.

g. May not wear tank tops, short crop tops (midriff must be covered), low cut or revealing attire.

3. Corrective action for inappropriate attire and poor personal hygiene.
   a. If a student is not dressed appropriately or has poor personal hygiene as identified above, he/she will be sent home to resolve the issue. The time away from clinical will result in a loss of clinical time and the student's CTO will be used to replace this lost time. If the student does not have adequate CTO to replace the lost time the lost clinical time will be made up and the clinical grade will be changed according to the Clinical Absence Grade Status policy.

E. Class Dress Policy - 1202

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	7-01	**Effective Date:**	7-01
Review Date:	5-08, 8-09, 6-10, 6-11,7-12, 5-13, 12-14, 4-16, 3-18, 08-19	**Revised Date:**	6-08, 12-14

Policy:
Minnesota State Community and Technical College (M State) Radiologic Technology program recognizes the learning process is more effective when students feel comfortable in the educational environment.

Procedure:
Students will dress appropriately for class. Clothing should be clean and comfortable. Shoes must be worn at all times.

F. Smoking Policy - 1251

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	5-08	**Effective Date:**	6-08
Review Date:	8-09, 6-10, 6-11,7-12, 5-13, 4-16, 3-18, 08-19	**Revised Date:**	

Policy:
Minnesota State Community and Technical College (M State) Radiologic Technology Program and its affiliated health care partners are committed to improving the health and well-being for people of all ages and strive to be leaders in health promotion. Establishment of tobacco-free environments at the affiliated health care partner locations clearly states the commitment to promoting healthy lifestyles.

Purpose:
Health care employees and students need to set an example for good health practices, including disease prevention and treatment, as well as support a healthy and safe atmosphere.

General Information:
M State Radiologic Technology students are not allowed to smoke or use other forms of tobacco on affiliated health care partner grounds. Students who do smoke must do so off these grounds and in locations not visible to the public.

Procedure:
Students who arrive at the health care partner facility smelling of smoke will be asked to change into suitable alternate clothing or will be sent home to change into odor-free clothes. Clinical time off (CTO) will be used to cover the hours absent from the health care partner facility to change clothes. Guidelines for CTO usage can be found in the Student Absence Policy and the Clinical Absence - Grade Status Policy located in this handbook. Students who do not comply with this policy will be subject to the student discipline/termination policy.

G. Cell Phone Use Policy - 1252

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	6-08	**Effective Date:**	7-08
Review Date:	8-09, 6-10, 6-11,7-12, 5-13, 12-14, 4-16, 3-17, 3-18, 08-19	**Revised Date:**	

Policy:
Cellular phones may not be used or carried in “on” position in patient care areas in the affiliated health care partner facilities. Students may use cellular phones on scheduled breaks and at lunch time in the areas designated by the facility.

Purpose:
Cellular phones transmit radio frequency signals and may create electromagnetic interference in electronic health care equipment; therefore cellular phones may only be powered on or used in designated areas of the affiliated health care facility.

General Information:
Personal phone calls should be made on the student’s break time. However, the program recognizes that occasionally students must place or receive personal calls during scheduled clinical hours. If the student is anticipating a call the student is expected to distribute the contact information of the affiliated clinical site and alert the person answering phones at that facility of the need to receive the call. If the student needs to make a call, the student must inform the clinical instructor or supervising technologist of that need and follow the facility procedure on outgoing phone calls or cell phone usage areas.

Procedure:
All students must have cellular phones powered off when in patient care or restricted cellular phone areas. Any student not abiding by this policy will be subject to disciplinary actions outlined in the student discipline/termination policy.

H. Student Health and Bloodborne Pathogen Exposure Control Policy - 1301

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	7-01	**Effective Date:**	7-01
Review Date:	5-08, 8-09, 6-10, 7-12, 5-13, 12-14, 4-16, 3-17, 3-18,	**Revised Date:** 08-19	6-08

Policy:
In order to protect the health of the student as well as those that the student comes into contact with (i.e., patients, family, friends, fellow students, faculty, co-workers, etc.), the program and the College require that each student provide the College with proof of immunization to mumps, measles, rubella (MMR), diphtheria, tetanus, whooping cough (Tdap) and hepatitis B (3 step), varicella and flu vaccine. In addition, a two-step tuberculin skin test is required prior to beginning clinical assignments (as part of the pre-enrollment physical exam). The TB skin test result is kept on file with the other health information, and in the event of a positive result documented follow-up (including recommendation concerning return to work) by a physician must be provided. The TB skin test is repeated at the beginning of the second year (annually), as well as infection control in-service education as required by OSHA.

Information concerning health services, health service fees, immunization requirements and the College's AIDS policy are all published in the College's Student Handbook. (Available online: http://www.minnesota.edu/handbook/)

Purpose:
The purpose of this policy is to eliminate or minimize exposure of the student and those that the student comes into contact with (i.e., patients, family, friends, fellow students, faculty, co-workers, etc.) from exposure to blood, body fluids or infectious/contagious diseases.

General Information:
Conditions requiring removal from the clinical assignment are as follows:

1. **Open draining lesions:** The program director will remove a student from clinical until seen by a physician, diagnosed, treated and determined by the physician to be non-contagious.

2. **Streptococcal infection:** Any student with a sore throat, especially accompanied by fever, should request to have a throat culture. These can be done by the student's personal physician.

   ** If group A streptococci are found, the student will be removed from his/her clinical assignment until 24 hours after antibiotic therapy is started and is afebrile (without fever); the student is to be treated for 10 full days with a suitable antibiotic.**

3. Staphylococcal infection:
   a. Because of the ubiquitous nature of staph aureus, asymptomatic carriers are not isolated or treated.

b. Students with active staph aureus infections may not attend clinical. If a student relates a diagnosis of staph aureus infection, the program director will require written verification from the student's physician stating the circumstances under which the student may work to avoid transmitting infection.

4. Students with the following diagnosed conditions shall not be permitted to carry out their clinical assignment.

   a. Respiratory tract infections: i.e. group A strep, any pneumonia, active pulmonary TB, influenza, mumps.

   b. Active exanthems (rashes): chicken pox, herpes zoster, measles or rubella.

   c. Enteric infections: hepatitis, salmonellosis, shigellosis, amebiasis, giardiasis, pink eye, vomiting and diarrhea of unknown etiology until etiology is determined (and treated if appropriate) or symptoms abate.

   d. Herpes simplex: shall not care for immunosuppressed patients, including newborns, as per clinical affiliate's policy.

5. The clinical education center(s) infection control officer(s) will be consulted whenever a concern exists regarding the transmission of any infectious agent and will direct surveillance, follow-up and prophylactic activities.

6. Standard/universal precautions: All students are provided with initial education and in-service education regarding the practice of universal precautions and are expected to adhere to these procedures in order to prevent acquiring or transmitting infectious agents.

PLEASE REFER TO THE BLOODBORNE PATHOGENS EXPOSURE CONTROL POLICY ON THE NEXT PAGE.

Procedure:
In order to assure proper infection control, infectious/contagious diseases require that the student be removed from his/her clinical assignment until he/she is determined by a physician to be noninfectious. The student is required to use clinical time off (CTO) for any clinical time missed. Guidelines for CTO usage can be found in the Student Absence Policy and the Clinical Absence-Grade Status Policy located in this handbook.

Additional Information:
Student Accident and Health Insurance Plans
Please be aware and understand that Minnesota State Community and Technical College does not carry accident and health insurance for students enrolled. If the student does not have personal coverage through some insurance plan/carrier, he/she will not be covered by a policy for health or accident during attendance at Minnesota State Community and Technical College. Questions and further information regarding student accident and health coverage may be directed to the Student Development Services Department. However, Health Division students are covered by liability insurance when serving clinical portions of required classes.

MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE

Policy Name: Bloodborne Pathogens Exposure Control

Policy:
It is the policy of Minnesota State Community and Technical College that all employee job duties and academic programs will be reviewed to determine which employees and students may reasonably expect to incur exposure to blood or other potentially infectious materials as a result of their employment or participation in an academic program.

For occupationally exposed employees, the College will implement and enforce a written set of protective procedures, the Exposure Control Plan. The College will provide training within 10 days of hire on bloodborne pathogens and the Exposure Control Plan. Refresher training will be provided annually. Vaccinations for hepatitis B virus and all personal protective equipment needed for protection from bloodborne pathogens will be provided at no cost to the employee. In addition, all medical follow-up after an exposure will be provided at no cost to the employee. All confidentiality rules will be followed regarding medical records of employees.

For students participating in academic programs in which exposure may be expected, the College will provide information and training on bloodborne pathogens and exposure control procedures as a part of the curriculum of the program. Students will be issued and expected to use all necessary personal protective equipment when working on campus. Vaccinations will be encouraged but will be considered the financial responsibility of the student. Also, medical follow-up after exposure incident will be encouraged by the College but will be considered the financial responsibility of the student. All confidentiality rules will be followed regarding medical records of students.

Purpose:
It is the purpose of this policy to establish an exposure control plan, implement training and provide for personal protective equipment and vaccinations in an effort to protect the health of employees and students who may be exposed to bloodborne pathogens as a result of their job duties or participation in a College academic program.

Campus Contact Person for the Bloodborne Pathogens Program	Participates in identifying occupationally exposed employees or academic programs in which students may expect exposure. Ensures training is offered to all occupationally exposed employees, initially after hire and annually thereafter. Initiates medical follow-up after report of an exposure incident.
Human Resources Department	Ensures occupationally exposed employees are offered the hepatitis B vaccination. Maintains the hepatitis B consent/declination forms.
Faculty and Staff identified as occupationally exposed	Participates in training and follows all the rules as described in the Exposure Control Plan. Reports any exposure incident

	immediately to the Campus Contact Person(s).
Deans	Ensures that students are given information on bloodborne pathogens, the College's bloodborne pathogens policy and exposure control as a part of the curriculum.
Students participating in a curriculum that may incur exposure to blood	Participates in training and follows all the rules as described in the exposure control portion of the academic program. Reports any exposure incident immediately to their academic supervisor.

References:
OSHA Regulation 29 CFR 1910.1030

Steward: Chief Financial Officer
Approval Date: March 1, 2005
Implementation Date: March 1, 2005
Revised Policy Format Only: July 31, 2012

I. Attendance Policy - 1401

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	7-01	**Effective Date:**	7-01
Review Date:	5-08, 8-09, 6-10, 6-11, 7-12, 5-13, 12-14, 4-16, 3-17, 3-18, 08-19	**Revised Date:**	6-08

Policy:

Students are expected to be present and punctual every scheduled day of the program. Class and clinical courses begin promptly at the time scheduled. Students are expected to arrive a few minutes early and assume their class or clinical responsibilities on time. Students arriving after scheduled times will be marked tardy for official records.

Purpose:

The purpose of this policy is to ensure equal, quality educational experiences for all students.

General Information:

Students are required to complete a time card each week of clinical rotations throughout each semester. The time card is to be approved at the end of each week by a technologist electronically in the Trajecsys system. The time card is then delivered to the program instructor supervising that clinical course.

If the student is unable to attend a scheduled clinical time the student must contact the clinical site and the clinical course instructor prior to the scheduled time of arrival. The student will also complete a clinical time-off form indicating the day and time missed from the clinical schedule. The student must also include documentation, when appropriate, from a physician stating the student can return to his/her clinical assignment as listed in the student health policy above. The responsibility for initiating completion of the clinical time off form is the student's responsibility and should be completed immediately the following clinical day present.

Procedure:

When illness or emergency dictates a student’s absence, he/she will:

1. Call the clinical instructor or supervisor at his/her assigned clinical site before the start of his/her shift to report absence from clinical. This will be documented at the clinical site.

   ** Phone numbers for Clinical Education Sites as well as program officials are listed in the general information section of this handbook.

2. Contact the appropriate program official by leaving a message via voice mail or email if they are not immediately available.
3. Complete an absent report form upon returning the following scheduled class day. These forms are located in this student clinical handbook with clinical time sheets and in Trajecys as well as in the classroom.

Additional Information:

Student Maximum Hours

Students in the Radiology program at no time will be scheduled more than 40 hours per week of combined clinical and didactic hours.

Students will be scheduled evening and weekend rotations starting in the first summer semester and ending in the last spring semester while enrolled in the program. The evening hours will be 1 p.m. to 9 p.m. with weekend hours varying per clinical site. To ensure the student does not exceed the 40 hour maximum while scheduled for evening and weekend rotations, appropriate time off will be designated.

J. Student Absence Policy - 1402

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	7-01	**Effective Date:**	7-01
Review Date:	5-08, 8-09, 6-10, 6-11, 5-13, 12-14, 4-16, 3-17, 3-18, 08-19	**Revised Date:**	6-08

Policy:
Students will be allowed 40 hours per year (summer, fall and spring) as clinical time off (CTO). These 40 hours will be used for any and all time not present at a scheduled clinical site (sick days, personal leave, bereavement leave etc.)

Purpose:
The Radiologic Technology program recognizes students will occasionally need to be absent from clinical rotations and have found 40 hours a year of clinical time off to be an adequate amount.

General Information:
Students can take available CTO at any time in the program. CTO must be taken in increments of at least one half hour.

Students are required to make up any clinical hours missed above and beyond the allotted 40 hours and the clinical grade will be affected as indicated in the Clinical Absence-Grade Status Policy.

Using CTO for evening and weekend shifts is highly discouraged.
In addition to these 40 hours, second-year students will be allowed one day designated as an "interview" day and **must be pre-approved** as indicated on the student absent forms. Any days absent that were not approved prior to interview will be sited as a clinical absent day and the student will be required to make up the lost clinical hours if this time exceeds the 40 hour CTO allotment. This day is to be used only for the purpose in which is stated; that being for interviews including travel time.

There is no banking of additional time. If a student stays late to complete an exam, credit for this time must be taken the following clinical day with permission from the clinical instructor. STUDENTS CANNOT "COLLECT" TIME TO BE USED AT A LATER DATE.

Procedure:

1. The student will notify the clinical site and the clinical course instructor by a means mutually agreed upon (usually by phone or email) prior to the time of the scheduled shift. If the student does not contact the site and clinical course instructor prior to the scheduled clinical shift, that student could be subject to disciplinary action as outlined in the Student Disciplinary/Termination policy.
2. The student will fill out and submit the student absent report form to the clinical course instructor on the next clinical day present.
3. If the clinical day to be absent is preplanned the student must hand in the student absent report form prior to the anticipated day off.

K. Clinical Absence-Grade Status Policy - 1403

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	7-01	**Effective Date:**	7-01
Review Date:	5-08, 8-09, 6-10, 6-11, 7-12, 5-13, 12-14, 4-16, 3-17, 3-18, 08-19	**Revised Date:**	6-08

Policy:
There will be a drop of one letter grade for every 1 day or 8 hours absent beyond the student's 40 hours of Clinical Time Off (CTO). Repeated absences may result in student termination from the program.

Purpose:
The purpose of this policy is to ensure equal and adequate time to obtain necessary clinical experience and competencies mandated by the American Registry of Radiologic Technologists (ARRT).

General Information:
Days absent above and beyond the annual allotted 40 hours CTO will be cumulative for that given year in the program (i.e. students absent 2 clinical days for the year beyond their 40 hours CTO, or a student absent for one 8 hour block will be dropped one letter grade and absent an additional 8 hour block will be dropped two letter grades). Students receiving a letter

grade below “C” due to absence will be terminated from the program. Students must take CTO in no less than ½ hour increments. Those students with repeated tardiness are subject to disciplinary action as stated in the Student Discipline/Termination policy in this manual.

Procedure:
All required clinical time missed beyond the 40 hours CTO will be made up. If a student must be absent from clinical, it will be his/her responsibility to schedule make-up clinical time with the Program Director or Clinical Coordinator. The days and times the clinical hours will be made up will be determined and scheduled by the Program Director or the Clinical Coordinator. Clinical time will be made up based on an equal ratio of time missed. Example: Student missed 8 hours of clinical time – student makes up 8 hours of clinical time. This constitutes a drop of one letter grade. Student misses16 hours clinical - student makes up 16 hours clinical time. This also constitutes a drop in two letter grades.

Special circumstances may be considered in situations of extended illness, but a doctor’s note may be required for all illnesses resulting in two or more clinical days. A note from a physician will be required for absences of more than two days, or as listed previously in the student health policy. THIS WILL BE ENFORCED.

L. Student Employment Policy - 1501

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	7-01	**Effective Date:**	7-01
Review Date:	5-08, 8-09, 6-10, 6-11, 7-12, 12-14, 4-16, 3-18, 08-19	**Revised Date:**	6-08

Policy:
It is the policy of the Minnesota State Community and Technical College that students enrolled in the Radiologic Technology Program do not accept or engage in paid employment as a radiologic technologist.

Purpose:
The purpose of this policy is to clearly identify the difference between being a student radiographer and a radiologic technologist. As one must realize that a student who engages in employment as a radiologic technologist is presenting him/herself to patients and to co-workers as a fully qualified radiologic technologist. Since such a student may not be able to perform up to the accepted "standards of practice," the student would be demonstrating a lack of concern for the patient, co-workers, employing agency, etc., by being unable to provide competent radiological services.

Subsequently, the individual student’s ethical standards would be viewed as questionable.

General Information:
Should a student choose not to comply with this policy, the Minnesota State Community and Technical College, the Radiologic Technology program, the clinical affiliates of the program, all

of the respective administrative personnel and program officials will not accept any legal obligation for any liability arising out of the actions of said student(s).

Procedure:
If a student chooses to be employed by a clinical affiliated site, this employment is outside of all program didactic and clinical education time. AT NO TIME WILL A STUDENT BE "STAFFED" DURING HIS/HER CLINICAL HOURS. STUDENTS ARE NOT ALLOWED TO BE PAID FOR CLINICAL TIME, NOR ARE THEY ALLOWED TO COMPLETE ANY COMPETENCY EXAMS DURING PAID TIME.

Students will not be allowed to document exams in their clinical log book while they are employed as a student radiologic technologist. If this is observed, students face the possibility of probation or possible termination from the program.

Students are not allowed to wear their school name tag or radiation monitoring device while employed at a health care facility. Students must be provided with a separate radiation monitor badge and name tag from the facility that employs them.

M. Student Supervision Policy - 1601

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	7-01	**Effective Date:**	7-01
Review Date:	5-08, 8-09, 6-10, 6-11, 7-12, 5-13, 12-14, 4-16, 3-17, 3-18, 08-19	**Revised Date:**	6-08

Policy:
Until the student achieves the program's required competency in a given procedure (as evidenced by a completed final competency of such procedure), all clinical assignments shall be carried out under the direct supervision of a registered radiologic technologist.

Once the student achieves the program's required level of competency in a given procedure the student may perform that procedure under indirect supervision. With indirect supervision, supervision is provided by a registered radiologic technologist immediately when needed to assist students regardless of the level of student achievement.

In the interest of radiation protection, all unsatisfactory radiographs will be repeated only in the presence of a registered radiologic technologist (regardless of the competency level of the student, or the difficulty level of the exam).

Purpose:
The purpose of this policy is to maintain quality radiographic services for all patients and compliance with the As Low As Reasonably Achievable (ALARA) principle while providing educational opportunities for students in this program.

General Information:
Student supervision policy interpretation/clarification

The term "direct supervision" shall be interpreted to mean that a registered radiologic technologist is present in the exam room to supervise student activities. The term "indirect supervision" shall be interpreted to mean that a registered radiologic technologist is within vocal range of the student so that if the student encounters problems he/she can call for and receive help from the technologist.

This policy shall be interpreted to mean that any student (first- or second-year) will require direct supervision for any exam that the student has not proven competence through a final competency check-off.

This policy shall further be interpreted to mean that even after the student proves competence he/she cannot go to the hospital floors to do portable or surgical exams/procedures alone, because in doing so the technologist is not "immediately available." When students do mobile exams after receiving a final competency check-off, a registered radiologic technologist must accompany them to the floor. The technologist does not need to go into the room but must be within vocal range. In addition to mobile exams, students must not be left alone in the department without indirect supervision.

Finally, this policy explicitly states that all repeat radiographs are to be done only if a registered radiologic technologist accompanies the student into the room and directly observes and supervises corrective action. This policy must be followed no matter how simple the corrective action may be and no matter how competent the student may be.

The onus of responsibility for making sure this policy is followed will be placed on the student. Technologists need to realize that students will refuse to go to the floor alone when doing portables and will refuse to do repeat radiographs unless a registered technologist provides direct supervision because, if any student is observed in violation of this policy (as outlined in this handbook), disciplinary action will be initiated on the student.

Procedure:
Following are the parameters of direct supervision:

1. The registered radiologic technologist reviews the request for examination in relation to the student's achievement.
2. The registered radiologic technologist evaluates the condition of the patient in relation to the student's achievement.
3. The registered radiologic technologist is present to assist the student as necessary.
4. The registered radiologic technologist reviews and approves the radiographs.

N. Radiation Safety Guidelines/Policy as related to occupational exposure - 1701

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	7-01	**Effective Date:**	7-01
Review Date:	6-11, 7-12, 3-13, 12-14, 5-16, 4-17, 3-18, 08-19	**Revised Date:**	3-13, 4-17

Policy:
Minnesota State Community and Technical College (M State) Radiologic Technology Program recognizes the importance of monitoring exposure to radiation and therefore provides radiation monitoring badges to the students enrolled in the program.

Purpose:
To keep exposure of the radiation worker well below annual effective dose limit.

General Information:
"Standards for Protection Against Radiation" establishes radiation dose limits for occupationally exposed adults. These limits apply to the sum of the dose received from external exposure and the dose from internally deposited radioactive material. The annual limits for adults are 0.05 Sv (5 rem) total effective dose equivalent or 0.5 Sv (50 rem) total organ dose equivalent to any single organ or tissue (other than the lens of the eye), whichever is more limiting. The occupational dose limits for minors are 10 percent of the dose limit for adults, and a dose limit for the embryo/fetus of 5 mSv (0.5 rem) during the entire pregnancy.

It is the M State Radiologic Technology Program's goal to ensure that all students, both over and under 18, receive less than 0.002 Sv (200) mrem whole body dose while in the program. This goal demonstrates an extreme limit to the students' overall occupational exposure to ionizing radiation.

If a student receives more than 0.5 mSv (50) mrem during any reporting period, a conference will be held with the RSO and the student to discuss the increased radiation dose and will be advised by program officials to determine the cause of the increased exposure and will develop a plan to limit radiation exposure for the remainder of the clinical semesters. This practice will ensure that the ALARA principle is being upheld at all times and ensures that the student will not meet or exceed the annual total radiation exposure amount.

Procedure:
1. All Radiologic Technology students will be issued one radiation dosimeter which will be worn on the collar or near the neck on the outside of the lead apron. This dosimeter will be changed on a quarterly basis. The program director or clinical coordinator will exchange and collect these dosimeters, which will be sent to the college's dosimetry service provider for an occupational radiation exposure reading and report.

    a. Dosimeter reports will be kept at the school for a period of 20 years post-graduation.
    b. Graduate students will be issued an "end dosimeter report" upon exiting the program.

2. The results of the occupational radiation exposure record/report will be posted in the Radiologic Technology Program Lab. If the amount of exposure represents a level that is higher than normal or if the exposure exceeds ALARA (As Low As Reasonably Achievable) guidelines, the results will be discussed with the student.

    a. Students will be required to initial their reading when reports are posted.

3. All students will wear a lead apron at all times when working in a radiation exposure area such as fluoroscopy, surgery and portable work. Care should be taken not to expose the back to the radiation source (machine) if not wearing a wrap-around apron.

4. All students are educated and orientated on radiation safety prior to the start of (and during) their clinical rotations.

5. If a student becomes pregnant she may voluntarily notify the program director so that radiation exposure records can be reviewed, an additional dosimeter can be ordered and education on the safety precautions necessary for protecting the fetus can be given. Please refer to the pregnancy policy outlined in this handbook.

6. It will be the responsibility of the program director/radiation safety officer to inform the student when exposure exceeds the pre-established limits as noted in the general information of the policy. A written report with possible cause, corrective action and follow-up will be sent to the student along with other appropriate authorities. In addition, the student will be counseled if they exceed ALARA (As Low As Reasonably Achievable) guidelines and written documentation will be kept in the student file.

7. Students not to hold patients or image receptors for procedures within their clinical settings.

8. Students will abide by radiation safety policies and procedures for laboratory experiences at M State by reviewing the Radiation Safety Rules posted in the lab and on this page of the handbook before working with the radiology equipment in the lab.

Minnesota State Community and Technical College
Radiologic Technology Program Laboratory
RADIATION SAFETY RULES

- Students are not allowed to perform radiographic exposures of selves and others in the program laboratory.

- Students will not hold for any exposure. This would include phantom exposures and QA equipment testing.

- Students will remain behind the control booth for all exposures made. However, students will be required to wear their radiation safety badges during lab time.

- Any reported violations of the above will result in disciplinary action from program officials.

MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM
STUDENT RADIATION LOG

Student Name: _____

Students: In the event that you are involved in a procedure (e.g. C-Arm, Fluoro, Trauma, Mobile Exams, or General Procedures) that you are either in the room or in the room during excessive beam on time you must fill out this form and submit it with your weekly evaluation or time card.

Students are encouraged to NOT hold for exams

Exam Information:

Date: _____

Facility: _____

Procedure: _____

Fluoro Beam On Time: _____

Explain the Procedure: (For non-fluoro cases indicate the number and type of views held for and techniques used)

Student Signature: _____Date: _____

Technologist Signature: _____Date:_____

O. Background Study Requirement for Students in Clinical Programs - 1801

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	7-01	**Effective Date:**	7-01
Review Date:	5-08, 8-09, 6-10, 6-11, 7-12, 5-13, 12-14, 4-16, 4-17,	**Revised Date:** 08-19	6-08, 5-13, 6-19

Policy:

Students are informed of the following:

State law requires that any person who provides services that involve direct contact with patients and residents at a health care facility have a background study conducted by the State. An individual who is disqualified from having direct contact as a result of the background study and whose disqualification is not set aside by the Commissioner of Health will not be permitted to participate in a clinical placement in a health care facility. Failure to participate in a clinical placement required by the academic program would result in ineligibility to qualify for a degree in this program.

Purpose:

To provide safe, quality radiographic procedures to all patients.

General Information:

-Minnesota Department of Health Background Check: Students are required to complete a Minnesota Department of Health (MDH) Background Study after they have been notified of acceptance into the program. Students must pass the background study the summer prior to starting core Radiologic Technology classes, all Radiologic Technology students are required to have a clear record. The MDH background study must be repeated annually thereafter until the student graduates from the Radiologic Technology program.

An individual who is disqualified from having direct contact with persons served by the program as a result of the background study, and whose qualification is not set aside, will not be permitted to participate in a clinical placement in facilities with programs subject to MDH rules under Minnesota Statutes and licensure by the North Dakota Board of Medical Imaging and Radiation Therapy (NDMIRT) of North Dakota. This ruling prevents a student from starting core classes in the Radiologic Technology program. The purpose of this policy is to protect the health, safety and rights of patients who are served at associated clinical sites.

The Department of Human Services (DHS) determines disqualification and the Department of Human Services will inform an individual of this report. If a student has questions or would like to appeal the results of his/her background study, he/she may contact the Minnesota Department of Human Services, Licensing Division, PO Box 64242, St. Paul, MN 55164-0242.

Students may not attend clinical experiences until the study is deemed clear. Discrepancies found are kept confidential, but may preclude a student from participating in clinical experiences, at the discretion of the MDH and the clinical facility. Students should work with

the MDH to have discrepancies set aside, but should be aware that the process will need to be repeated with any subsequent MDH Background Study required (i.e. annually). Discrepancies not set aside by the MDH, will preclude the student from being able to participate in any clinical or service learning opportunities, which may jeopardize the student's ability to complete the radiologic technology program.

-National Background Study: Students will also be required to complete a national background study. The national background study is in addition to the required study with the Minnesota Department of Human Services. Information included in the national background study includes; County Criminal Record Search, National Criminal Database Search, ID Search, and National Sex Offender Public Registry Search. To learn more about criminal and public record searches, please go to http://www.verifiedcredentials.com/criminal-public-record-searches.

Students will be contacted with specific information and instructions prior to their first clinical experience and will be expected to meet the deadline indicated or will jeopardize their clinical experience. Students are responsible for all costs associated with the national background study.

Discrepancies found during the national background study are kept confidential. Students should be aware that if discrepancies are found, it is M State's contractual responsibility to disclose the specific results, while maintaining the student's confidentiality, to the clinical facility(s) where the student is assigned. At no time will a student's name or identifying information be shared. Should a facility refuse a student placement based on the outcome of the national background study, the College will make a reasonable effort to locate an alternate clinical site as appropriate, but cannot guarantee such placement, nor that the placement will be in the community of choice.

-Federal Background Study: Some clinical facilities require a Federal Background Study. The clinical facility conducts this study on the student's behalf. Students required to do the Federal Background Study must follow directions and expectations of the clinical facility.

Procedure:
Background studies are submitted prior to final admission to the radiology program and prior to expiration of the previous background study.

P. Clinical Incident Report Policy - 1901

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	7-01	**Effective Date:**	7-01
Review Date:	5-08, 8-09, 6-10, 6-11, 7-12, 5-13, 12-14, 4-16, 4-17 4-18, 08-19	**Revised Date:**	6-08

Policy:
It is the policy of the Minnesota State Community and Technical College Radiologic Technology program to report all injuries or misconduct that occurs at any clinical site.

Purpose:
The purpose of this policy is to ensure safe working conditions.

Procedure:
It shall be the responsibility of the clinical site where the injury occurred to report the incident and provide documentation of said incident to program officials.

A Clinical Incident Report form is included on the following page of this handbook. It is the student's responsibility to initiate completion of this form.

Minnesota State Community and Technical College
Radiologic Technology Program
Incident Report Form

This report must be filled out by student radiographers or clinical site instructors when the following incidents occur:

1. When a registered technologist is not available to directly or indirectly supervise a radiographic procedure.

2. When a registered technologist is not available to directly supervise any repeat radiographic procedure.

3. When any substandard, unethical or inappropriate conduct is observed.

THIS REPORT IS BEING FILED IN REFERENCE TO:

Name: _____

Date of Incident: _____

Site of Incident: _____

Description of Incident:

Signature: _____

Incident Report Action

This portion of the incident report form will be filled out by the clinical coordinator or program director upon completion of an investigation of the reported incident.

Incident Report Investigation Findings:

Action Taken:

Comments of student/Clinical Instructor:

Comments of Program Official/Clinical Site Manager:

Signature of student/ Clinical Instructor: _____

Signature of Program Official/Clinical Site Manager: _____

Date: _____

Original: 8/2004

Q. Laptop and internet requirements - 2001

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	8-09	**Effective Date:**	8-09
Review Date:	8-09, 6-10, 6-11, 7-12, 5-13, 12-14, 4-16, 4-18, 08-19	**Revised Date:**	

Policy:
It is the policy of Minnesota State Community and Technical College, Radiologic Technology program that all incoming students are required to have access to a laptop computer which can access the school's wireless network. The students must also have an Internet service provider.

Purpose:
These computers will be used for research, computer-based exams and in-class participation.

Procedure:
It shall be the responsibility of the student to obtain a laptop and Internet service provider. At this time the school does not recommend a particular service provider.

R. Compliance with JRCERT Standards Policy

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	12-09	**Effective Date:**	12-09
Review Date:	12-09, 6-10, 6-11, 7-12, 5-13, 12-14, 4-16, 4-17, 4-18, 08-19	**Revised Date:**	

Policy:
It is the policy of the Minnesota State Community and Technical College (M State) Radiologic Technology program to be in full compliance with the current JRCERT Standards and the associated objectives. A copy of these standards is made available and distributed to all program stakeholders (students, advisory committee members, clinical staff and administration, etc.). The JRCERT Standards are also available to any interested party from the program director or through the JRCERT website: www.jrcert.org.

Purpose:
The JRCERT Standards promote academic excellence in Radiologic Technology educational programs and require these programs to be responsive to allegations of non-compliance with JRCERT standards. The M State Radiologic Technology program will investigate all documented allegations of non-compliance. Any individual or group including students, faculty, clinical staff or general public may submit a complaint.

Procedure:

M State will address all allegations of non-compliance in the following manner:

1. The allegation must be presented to the program director in writing. The letter of complaint must include the following information:

    a. Name and address of the individual filing the complaint

    b. Specific JRCERT standard and associated objective in question

    c. Dates or examples of when the program was not in compliance with the JRCERT Standards

    d. Date complaint was submitted

2. The M State Radiologic Technology program director will investigate the complaint.

3. Within 10 working days the program director will send a written response to the individual making the complaint and to the JRCERT outlining the resolution and action taken to resolve the complaint.

    a. If the resolution is not acceptable to the individual making the complaint, the program director will direct the individual to the JRCERT process for reporting allegations of noncompliance. The JRCERT Process for Reporting Allegations and Allegations Reporting form is included with this policy.

4. The program director will keep a record of all complaints of non-compliance and their resolutions.

JRCERT Standards for an Accredited Educational Program in Radiography

Standard One: Integrity
The program demonstrates integrity in the following: representations to communities of interest and the public, pursuit of fair and equitable academic practices, and treatment of and respect for students, faculty and staff.

Standard Two: Resources
The program has sufficient resources to support the quality and effectiveness of the educational process.

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

Standard Four: Health and Safety
The program's policies and procedures promote the health, safety and optimal use of radiation for students, patients and the general public.

Standard Five: Assessment
The program develops and implements a system of planning and evaluation of student learning and program effectiveness outcomes in support of its mission.

Standard Six: Institutional/Programmatic Data
The program complies with JRCERT policies, procedures, and **STANDARDS** to achieve and maintain specialized accreditation.

S. MRI Safety Screening Policy - 2101

Approved By	Program Faculty	**Written By:**	M State Radiology Program Officials
Origination Date:	4-17	**Effective Date:**	4-17
Review Date:	4-18, 08-19	**Revised Date:**	

Policy:
It is the policy of the Minnesota State Community and Technical College Radiologic Technology program that all students are required to participate in and successfully complete an MR safety screening in-service prior to taking part in an MR modality training.

Purpose:
MR safety screening protects students and patients from unsafe exposure to MR equipment and clinical areas.

Procedure:
It is the responsibility of the Radiographic Clinical I instructor to secure an MR safety screening in-service provider. This in-service provider will provide an MR safety screening training session that is consistent with the current MR safety screening procedures used in industry. The students will attend the in-service and successfully complete all requirements. The attendance will be noted on a sign in roster and kept in the class folder. Students will be provided with a completion certificate.

IX. INSTITUTIONAL POLICIES

A. Appeals and grievance procedure:

The following hyperlinks will direct you to the College's Policies and Procedures:

https://www.minnstate.edu/board/policy/

https://www.minnesota.edu/about/policies-and-procedures

A student who feels that their right to an education is being affected unfairly due to the presence of a technical college academic or non-academic policy has the right to seek remedy. Please refer to the following links for the policy and procedure.

https://www.minnesota.edu/associated_downloads/application_pdf/ComplaintsGrievancesInformalConcernsPolicyf5.20.19.pdf

https://www.minnesota.edu/associated_downloads/application_pdf/ComplaintsGrievancesInformalConcernsProceduref5.20.19.pdf

B. Weather and emergency cancellations and closings:

The following is a hyperlink that will direct you to M State's Weather and Emergency Cancellations Closings:

https://www.minnesota.edu/policies

C. Star alert system:

Star Alert: https://mstate.custhelp.com/app/answers/detail/a_id/86/kw/star%20alert

The radiology program does not have a specific policy which addresses the unique situation for having multiple clinical sites throughout the region. Follow the recommendations suggested to insure your safety.

First check the road conditions for your area and the clinical site where you will be traveling to. Use a reputable source, such as those listed in the M State Weather Policy, and the North Dakota Department of Transpiration website, https://www.dot.nd.gov/. Follow the recommendations for travel especially when traveling from your home or clinical site location.

- If no travel is recommended, stay home and got to clinical sites as conditions allow
- Contact the clinical site and the M State Radiologic Technology faculty to inform them you will arriving late or that you will not be attending clinical that day.
- Enter the time you are not present in Trajecys.
- This time will not be counted as CTO and does not need to be made up unless necessary. Additional clinical days may be assigned if needed to complete clinical competencies.
- Please use sound judgment when making these decisions.

Your safety is our number one concern. Thank you for acting as responsible, accountable students. The institutional policies of the sponsoring institution, Minnesota State Community and Technical College, are contained in the Student Handbook.

D. Student accident and health plan:

Please be aware and understand that the Minnesota State Community and Technical College does not carry accident and health insurance for students enrolled. If the student does not have personal coverage through some insurance plan/carrier, he/she will not be covered by a policy for health or accident during attendance at Minnesota State Community and Technical College. Questions and further information regarding student accident and health coverage may be directed to the dean of the program.

Health Division students are covered by liability insurance when serving clinical portions of required classes.

Information concerning health services, health service fees, immunization requirements and the College's AIDS policy are all published in the institution's Student Handbook.

X. INSTITUTIONAL SERVICES

A. Academic guidance and student counseling:

Counseling service referrals are available to each student prior to, during and following enrollment.

The program director and clinical coordinator serve as academic advisors for all students in the Radiologic Technology program. Each student is assigned an academic advisor who is available for academic advising, either by appointment or as time permits during the school year. Appointments are scheduled by the advisor on a mid-semester and end-of-semester basis.

B. Library facilities:

The library located on the Detroit Lakes campus has a seating capacity of approximately 50 students with access to 18 computer stations. Extensive health resources, periodicals and newspapers are available to students. The library provides the student with 40 on campus hours and online access through SpartanNet for studying, doing research activities including the access to over 80 databases including ProQuest and EBSCO Health sources. The library also offers access to 120,000 full-text reference eBooks, interlibrary loan services, photocopying, scanning, computerized review and instruction, audio-visual viewing including DVD and VHS. There are reference materials readily available to students in the offices of the program director and clinical coordinator.

The library is also networked with the University of Minnesota's main library through Minitex and the MnPALS system. This membership includes the borrowing of materials on an interlibrary loan basis, which also provides access to major university libraries in Minnesota.

The clinical affiliates also make their library and reference materials available for student use.

XI. Handbook Policy Signature Forms

Minnesota State Community and Technical College
Radiologic Technology Program

Attendance & Absence (Policy Nos. 1401, 1402 and 1403), Health (Policy No. 1301) and Dress (Policy Nos. 1201 and 1202) Policy Agreement

I have reviewed the Attendance, Health and Dress Policies. I understand the terms of these policies and agree to abide by the standards established therein. I expect that any violation I commit of the stated policies will result in disciplinary action.

_____

Student Signature

_____

Date

Minnesota State Community and Technical College
Radiologic Technology Program

Smoking (Policy No. 1251) and Cell Phone Use (Policy No. 1252) Policy Agreement

I have reviewed the Smoking and Cell Phone Use policies. I understand the terms of these policies and agree to abide by the standards established therein. I expect that any violation I commit of the stated policies will result in disciplinary action.

_____

Student Signature

_____

Date

Minnesota State Community and Technical College
Radiologic Technology Program
Student Employment Policy (Policy No. 1501) Agreement

I have reviewed the Student Employment Policy. I understand the terms and conditions of said policy and intend to comply. I understand that Minnesota State Community and Technical College assumes no liability or any other form of legal obligation for any situations that may occur as the result of my choosing to be employed as a Student Radiologic Technologist.

_____
Student Signature

_____
Date

Minnesota State Community and Technical College
Radiologic Technology Program
Student Supervision Policy (Policy No. 1601) Agreement

After having reviewed the Student Supervision Policy, I understand and agree to abide by the standards as stated in the policy. I further understand that it is my responsibility to make certain that I engage in clinical activities only when properly supervised and that disciplinary action will result if I do not.

_____
Student Signature

_____
Date

Minnesota State Community and Technical College
Radiologic Technology Program
Radiation Dosimetry Release Form

The undersigned grants permission to the Minnesota State Community and Technical College Detroit Lakes Radiologic Technology program to post radiation dosimetry reports in the radiology lab for the purpose of informing and allowing personal access to individual exposure levels. This release form does not grant permission for the release of this or any other personal information to anyone for any other reason.

Student Signature

Date

Minnesota State Community and Technical College
Radiologic Technology Program
Student Handbook Agreement Form

After having reviewed the Radiologic Technology Student Handbook, I understand and agree to abide by the policies and standards as stated in the Handbook.

_____

Student Signature

_____

Date

Minnesota State Community and Technical College
Radiologic Technology Program
Laptop and Internet Usage Agreement Form

After reviewing the Laptop and Internet Usage Policy, I understand and agree to abide by the standards as stated in the policy. I further understand that it is my responsibility to make certain that I have a laptop and Internet service provider.

Student Signature

Date

XII. Clinical Course Outlines

RADT1180

Radiographic Clinical I

Credits:	5 (0/0/5)
Description:	The emphasis of this clinical rotation will be on radiographic positioning and manipulation of radiographic equipment and accessories related to radiography of the thoracic and abdominal viscera, upper and lower extremity, shoulder girdle and pelvis.
Prerequisites:	RADT1132 RADT1140 RADT1146
Corequisites:	RADT1190
	1. Demonstrate competency in imaging procedures by meeting the American Registry of Radiologic Technologists (ARRT) requirements. 2. Use professional communication with instructors, peers and members of the health care team. 3. Exercise the priorities required in daily clinical practice. 4. Execute medical imaging procedures under the appropriate level of supervision. 5. Adhere to team practice concepts that focus on organizational theories, roles of team members and conflict resolution. 6. Adapt to changes and varying clinical situations. 7. Provide patient-centered, clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity or culture. 8. Integrate the use of appropriate and effective written, oral and non-verbal communication with patients, the public, and members of the health care team in the clinical setting. 9. Recognize the influence of professional values on patient care. 10. Use patient and family education strategies appropriate to the comprehension level of the patient and family. 11. Demonstrate competent patient assessment skills through effective management of the patient's physical and mental status. 12. Respond appropriately to medical emergencies. 13. Adapt procedures to meet age-specific, disease-specific and cultural needs of patients. 14. Assess the patient and record clinical history. 15. Apply standard and transmission-based precautions. 16. Apply the appropriate medical asepsis and sterile techniques. 17. Demonstrate competency in the principles of radiation protection standards. 18. Apply the principles of total quality management. 19. Examine procedure orders for accuracy and make corrective actions when applicable. 20. Demonstrate safe, ethical and legal practices. 21. Integrate the radiographer's practice standards into the clinical practice setting 22. Maintain patient confidentiality standards and meet Health Insurance Portability and Accountability Act (HIPAA) requirements. 23. Demonstrate the principles of transferring, positioning and immobilizing patients. 24. Adhere to national, institutional and departmental standards, policies and procedures regarding care of patients, providing radiologic procedures and reducing medical errors. 25. Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible. 26. Critique images for appropriate anatomy, image quality and patient identification. 27. Determine corrective measures to improve inadequate images.

MnTC goal areas: None

RADT1190

Radiographic Clinical II

Credits:	5 (0/0/5)
Description:	This clinical course emphasizes the basic radiographic procedures and positioning related to the upper and lower gastrointestinal tract and the biliary system. The student also will continue to acquire and build skills in performing radiographic procedures and positioning related to the thoracic and abdominal cavities and the upper and lower extremities including the shoulder girdle and the pelvis.
Prerequisites:	RADT1132 RADT1140 RADT1146
Corequisites:	RADT1180
Competencies:	1. Demonstrate competency in imaging procedures by meeting the American Registry of Radiologic Technologists (ARRT) requirements. 2. Use professional communication with instructors, peers and members of the health care team. 3. Exercise the priorities required in daily clinical practice. 4. Execute medical imaging procedures under the appropriate level of supervision. 5. Adhere to team practice concepts that focus on organizational theories, roles of team members and conflict resolution. 6. Adapt to changes and varying clinical situations. 7. Provide patient-centered clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity or culture. 8. Integrate the use of appropriate and effective written, oral and nonverbal communication with patients, the public and members of the health care team in the clinical setting. 9. Recognize the influence of professional values on patient care. 10. Use patient and family education strategies appropriate to the comprehension level of the patient and family. 11. Demonstrate competent assessment skills through effective management of the patient's physical and mental status. 12. Respond appropriately to medical emergencies. 13. Adapt procedures to meet age-specific, disease-specific and cultural needs of patients. 14. Assess the patient and record clinical history. 15. Apply standard and transmission -precautions. 16. Apply the appropriate medical asepsis and sterile technique. 17. Demonstrate competency in the principles of radiation protection standards. 18. Apply the principles of total quality management. 19. Examine procedure orders for accuracy and make corrective actions when applicable. 20. Demonstrate safe, ethical and legal practices. 21. Integrate the radiographer's practice standards into the clinical practice setting. 22. Maintain patient confidentiality standards and meet Health Insurance Portability and Accountability Act (HIPAA) requirements. 23. Demonstrate the principles of transferring, positioning and immobilizing patients. 24. Adhere to national, institutional and departmental standards, policies and procedures regarding care of patients, providing radiologic procedures and reducing medical errors. 25. Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible. 26. Critique images for appropriate anatomy, image quality and patient identification. 27. Determine corrective measures to improve inadequate images.

MnTC goal areas: None

RADT2100

Radiographic Clinical III

Credits:	5 (0/0/5)
Description:	This clinical course emphasizes the basic radiographic procedures and positioning related to the urinary system, the bony thorax and the vertebral column. The student is also introduced to radiographic exposure factors and off-peak (e.g. evening and weekend) clinical hours.
Prerequisites:	RADT1180 RADT1190
Corequisites:	RADT2110 RADT2222
Competencies:	1. Demonstrate competency in imaging procedures by meeting the American Registry of Radiologic Technologists (ARRT) requirements. 2. Use professional communication with instructors, peers and members of the health care team. 3. Exercise the priorities required in daily clinical practice. 4. Execute medical imaging procedures under the appropriate level of supervision. 5. Adhere to team practice concepts that focus on organizational theories, roles of team members and conflict resolution. 6. Adapt to changes and varying clinical situations. 7. Provide patient-centered clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity or culture. 8. Integrate the use of appropriate and effective written, oral and nonverbal communication with patients, the public and members of the health care team in the clinical settings. 9. Recognize the influence of professional values on patient care. 10. Use patient and family education strategies appropriate to the comprehension level of the patient and family. 11. Demonstrate competent assessment skills through effective management of the patient's physical and mental status. 12. Respond appropriately to medical emergencies. 13. Adapt procedures to meet age-specific, disease-specific and cultural needs of patients. 14. Assess the patient and record clinical history. 15. Apply standard and transmission-based precautions. 16. Apply the appropriate medical asepsis and sterile techniques. 17. Demonstrate competency in the principles of radiation protection standards. 18. Apply the principles of total quality management. 19. Examine procedure orders for accuracy and make corrective actions when applicable. 20. Demonstrate safe, ethical and legal practices. 21. Integrate the radiographer's practice standards into the clinical practice setting. 22. Maintain patient confidentiality standards and meet Health Insurance Portability and Accountability Act (HIPAA) requirements. 23. Demonstrate the principles of transferring, positioning and immobilizing patients. 24. Adhere to national, institutional and departmental standards, policies and procedures regarding care of patients, providing radiologic procedures and reducing medical errors. 25. Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible. 26. Critique images for appropriate anatomy, image quality and patient identification. 27. Determine corrective measures to improve inadequate images.

MnTC goal areas: None

RADT2110

Radiographic Clinical IV

Credits:	5 (0/0/5)
Description:	This clinical course emphasizes the basic radiographic procedures and positioning related to the skull, facial bones, paranasal sinuses and detailed areas of the skull. This clinical experience provides an opportunity to work with increased independence.
Prerequisites:	RADT1180 RADT1190
Corequisites:	RADT2100 RADT2222
Competencies:	1. Demonstrate competency in imaging procedures by meeting the American Registry of Radiologic Technologists (ARRT) requirements. 2. Use professional communication with instructors, peers and members of the health care team. 3. Exercise the priorities required in daily clinical practice. 4. Execute medical imaging procedures under the appropriate level of supervision. 5. Adhere to team practice concepts that focus on organizational theories, roles of team members and conflict resolution. 6. Adapt to changes and varying clinical situations. 7. Provide patient-centered clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity or culture. 8. Integrate the use of appropriate and effective written, oral and nonverbal communication with patients, the public and members of the health care team in the clinical settings. 9. Recognize the influence of professional values on patient care. 10. Use patient and family education strategies appropriate to the comprehension level of the patient and family. 11. Demonstrate competent assessment skills through effective management of the patient's physical and mental status. 12. Respond appropriately to medical emergencies. 13. Adapt procedures to meet age-specific, disease-specific and cultural needs of patients. 14. Assess the patient and record clinical history. 15. Apply standard and transmission-based precautions. 16. Apply the appropriate medical asepsis and sterile technique. 17. Demonstrate competency in the principles of radiation protection standards. 18. Apply the principles of total quality management. 19. Examine procedure orders for accuracy and make corrective actions when applicable. 20. Demonstrate safe, ethical and legal practices. 21. Integrate the radiographer's practice standards into the clinical practice setting. 22. Maintain patient confidentiality standards and meet Health Insurance Portability and Accountability Act (HIPAA) requirements. 23. Demonstrate the principles of transferring, positioning and immobilizing patients. 24. Adhere to national, institutional and departmental standards, policies and procedures regarding care of patients, providing radiologic procedures and reducing medical errors. 25. Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible. 26. Critique images for appropriate anatomy, image quality and patient identification. 27. Determine corrective measures to improve inadequate images.

MnTC goal areas: None

RADT2120

Radiographic Clinical V

Credits:	5 (0/0/5)
Description:	This clinical course provides the student with the opportunity to function more independently in all areas of basic radiography and to develop clinical skills in regular radiographic areas and procedures, with continuing experience in trauma and surgical procedures. The student will be exposed to special procedures and will begin rotations through the specialized areas of nuclear medicine, radiation therapy, computerized tomography, ultrasound and magnetic resonance imaging.
Prerequisites:	RADT2100 RADT2110 RADT2224
Corequisites:	RADT2130 RADT2280
Competencies:	1. Demonstrate competency in imaging procedures by meeting the American Registry of Radiologic Technologists (ARRT) requirements. 2. Use professional communication with instructors, peers and members of the health care team. 3. Exercise the priorities required in daily clinical practice. 4. Execute medical imaging procedures under the appropriate level of supervision. 5. Adhere to team practice concepts that focus on organizational theories, roles of team members and conflict resolution. 6. Adapt to changes and varying clinical situations. 7. Provide patient-centered clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity or culture. 8. Integrate the use of appropriate and effective written, oral and nonverbal communication with patients, the public and members of the health care team in the clinical settings. 9. Recognize the influence of professional values on patient care. 10. Use patient and family education strategies appropriate to the comprehension level of the patient and family. 11. Demonstrate competent assessment skills through effective management of the patient's physical and mental status. 12. Respond appropriately to medical emergencies. 13. Adapt procedures to meet age-specific, disease-specific and cultural needs of patients. 14. Assess the patient and record clinical history. 15. Apply standard and transmission-based precautions. 16. Apply the appropriate medical asepsis and sterile technique. 17. Demonstrate competency in the principles of radiation protection standards. 18. Apply the principles of total quality management. 19. Examine procedure orders for accuracy and make corrective actions when applicable. 20. Demonstrate safe, ethical and legal practices. 21. Integrate the radiographer's practice standards into the clinical practice setting. 22. Maintain patient confidentiality standards and meet Health Insurance Portability and Accountability Act (HIPAA) requirements. 23. Demonstrate the principles of transferring, positioning and immobilizing patients. 24. Adhere to national, institutional and departmental standards, policies and procedures regarding care of patients, providing radiologic procedures and reducing medical errors. 25. Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible. 26. Critique images for appropriate anatomy, image quality and patient identification. 27. Determine corrective measures to improve inadequate images.

MnTC goal areas: None

RADT2130
Radiographic Clinical VI

Credits:	5 (0/0/5)
Description:	This clinical course emphasizes the development of independence, discretion and judgment while performing basic radiographic procedures. It provides the student with the opportunity to function as a nearly registry-eligible radiographer. The student is expected to correlate all clinical and didactic experiences while demonstrating a high degree of proficiency and efficiency.
Prerequisites:	RADT2100 RADT2110 RADT2224
Corequisites:	RADT2120 RADT2280
Competencies:	1. Demonstrate competency in imaging procedures by meeting the American Registry of Radiologic Technologists (ARRT) requirements. 2. Use professional communication with instructors, peers and members of the health care team. 3. Exercise the priorities required in daily clinical practice. 4. Execute medical imaging procedures under the appropriate level of supervision. 5. Adhere to team practice concepts that focus on organizational theories, roles of team members and conflict resolution. 6. Adapt to changes and varying clinical situations. 7. Provide patient-centered clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity or culture. 8. Integrate the use of appropriate and effective written, oral and nonverbal communication with patients, the public and members of the health care team in clinical settings. 9. Recognize the influence of professional values on patient care. 10. Use patient and family education strategies appropriate to the comprehension level of the patient and family. 11. Demonstrate competent assessment skills through effective management of the patient's physical and mental status. 12. Respond appropriately to medical emergencies. 13. Adapt procedures to meet age-specific, disease-specific and cultural needs of patients. 14. Assess the patient and record clinical history. 15. Apply standard and transmission-based precautions. 16. Apply the appropriate medical asepsis and sterile techniques. 17. Demonstrate competency in the principles of radiation protection standards. 18. Apply the principles of total quality management. 19. Examine procedure orders for accuracy and make corrective actions when applicable. 20. Demonstrate safe, ethical and legal practices. 21. Integrate the radiographer's practice standards into the clinical practice setting. 22. Maintain patient confidentiality standards and meet Health Insurance Portability and Accountability Act (HIPAA) requirements. 23. Demonstrate the principles of transferring, positioning and immobilizing patients. 24. Adhere to national, institutional and departmental standards, policies and procedures regarding care of patients, providing radiologic procedures and reducing medical errors. 25. Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible. 26. Critique images for appropriate anatomy, image quality and patient identification. 27. Determine corrective measures to improve inadequate images.

MnTC goal areas: None

XIII. Clinical Documents

MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE
DETROIT LAKES, MN
WEEKLY EVALUATION FORM - CLINICAL I - 1st 2 weeks

**The purpose of this evaluation form is to provide input to new students in order to ensure adequate utilization of clinical time. This form will replace the standard BARS Evaluation Form for the first 2 weeks of the student's initial clinical experience.

Clinical Site: _____

Student's Name: _____

1. The student arrives to the clinical site on time.
   Yes No

2. The student actively seeks out and completes tasks upon arrival to clinical site (i.e., assist technologist with machine warm-ups, daily tasks, stocking of supplies, etc.)
   Yes No

3. The student seeks out technologist and actively follows technologist during daily tasks.
   Yes No

4. The student consistently demonstrates basic communication skills with technologists, staff, physicians and patients.
   Yes No

5. The student actively seeks out patient exams (i.e. watching for light or checking for order requests).
   Yes No

6. The student utilizes down-time for practicing equipment manipulation and/or positioning.
   Yes No

7. The student actively follows technologist to observe and assist with exams they have not yet seen.
   Yes No

****Note to technologist**: Please utilize space for comments; particularly where students received a "No". It is important for new students to understand how they can better utilize their clinical time in these "beginning stages" of their clinical practice.

Evaluator: _____ Date: _____

Minnesota State Community and Technical College
Radiologic Technology Program
Clinical I Weekly Evaluation

Student Name: _____

Rating Scale: 1 - The student **almost never** does this
2 - The student **sometimes** does this
3 - The student does this **at least 50%** of the time
4 - The student does this **at least 75%** of the time
5 - The student does this **at least 95%** of the time

Communication **1. Student explains the procedure to the patient in a concise manner and communicates/responds to patients in a polite and respectful manner.**	**1 2 3 4**
2. Communicates with physicians in a polite and respectful manner.	**1 2 3 4**
3. Communicates effectively with staff in a polite and respectful manner.	**1 2 3 4**
4. Communicates and responds to patients in a polite and respectful manner.	**1 2 3 4**
5. Student demonstrates a desire for success and accepts constructive feedback.	**1 2 3 4**
Patient Care	
1. Student demonstrates complete patient care skills.	**1 2 3**
2. Student is cognizant of patient comfort and responds to patient requests in a timely basis.	**1 2 3**
3, Student maintains a clean area and follows guidelines for standard precautions.	**1 2 3**
Equipment Operation	
1. Student is able to manipulate tubes/tables in all rooms in an efficient manner.	**1 2 3**
2. Student demonstrates knowledge of various machine functions (fluoro, tomo, radiographic).	**1 2 3**
Radiation Protection	
1. Student uses gonadal shielding when appropriate.	**1 2 3**
2. Student inquires about possible pregnancy when patient is within child bearing age.	**1 2 3**
3. Student uses collimation when possible.	**1 2 3**
4. Student provides/wears protective lead apparel when appropriate.	**1 2 3**
Patient Positioning	
1. Student is able to properly position patients for routine exams.	**1 2 3**
2. Student is able to assess when patient's condition will necessitate an adjustment from routine guidelines (Scoliosis, etc.).	**1 2 3**
3. Student uses appropriate props such as sponges, sandbags, etc. to maintain patient position.	**1 2 3**
4. Student demonstrates confidence in his/her clinical abilities.	**1 2 3**

Exposure Factor Manipulation	
1. Student demonstrates an understanding of the difference between AEC and manual techniques.	**1 2 3**
2. Student comprehends and applies knowledge of additive/destructive disease processes when choosing exposure factors.	**1 2 3**
3. Student comprehends and applies knowledge of different IR types, grid/non-grid techniques when selecting exposure factors.	**1 2 3**
4. Student comprehends and applies knowledge of how distance affects exposure factor.	**1 2 3**
Evaluating Quality Radiographs	
1. Student takes pride in producing high quality radiographs.	**1 2 3**
2. Student is able to identify when technical factors necessitate a repeat exam and is able to manipulate these factors appropriately.	**1 2 3**
3. Student is able to identify when positioning is inadequate and is able to make the necessary adjustments to produce a quality image.	**1 2 3**
Maintaining Patient Records	
1. Student consistently checks request for patient history.	**1 2 3**
2. Student accurately and consistently abides by the facility's requirements for documentation.	**1 2 3**
3. Student constantly and accurately labels images with appropriate information (patient data) right vs. left, etc.	**1 2 3**
Initiative	
1. Student initiates and prepares for exam without being told to do so.	**1 2 3 4**
2. Student demonstrates persistence in getting job done.	**1 2 3 4**
3. Student shows interest in exams not yet observed by assisting technologist.	**1 2 3 4**
4. Student is able to work with direct/indirect supervision when completing exams.	**1 2 3 4**
5. Student uses slow times for clinical practice and didactic review.	**1 2 3 4**
Compliance	
1. Student wears appropriate uniform including name tag, rad badge, predominantly white shoes and is neat in appearance.	**1 2 3 4 5**
2. Student is consistently punctual for scheduled shifts.	**1 2 3 4 5**
3. Student uses allocated time off appropriately.	**1 2 3 4 5**
4. Student follows directions consistently.	**1 2 3 4 5**

Comments:

Evaluator Signature: _____ **Date:** _____

Clinical Site: _____

Minnesota State Community and Technical College
Radiologic Technology Program
Clinical II Weekly Evaluation

Student Name: _____

Rating Scale: 1 - The student **almost never** does this
2 - The student **sometimes** does this
3 - The student does this **at least 50%** of the time
4 - The student does this **at least 75%** of the time
5 - The student does this **at least 95%** of the time

Communication **1. Student explains the procedure to the patient in a concise manner and communicates/responds to patients in a polite and respectful manner.**	**1 2 3 4**
2. Communicates with physicians in a polite and respectful manner.	**1 2 3 4**
3. Communicates effectively with staff in a polite and respectful manner.	**1 2 3 4**
4. Communicates and responds to patients in a polite and respectful manner.	**1 2 3 4**
5. Student demonstrates a desire for success and accepts constructive feedback.	**1 2 3 4**
Patient Care	
1. Student demonstrates complete patient care skills.	**1 2 3 4**
2. Student is cognizant of patient comfort and responds to patient requests in a timely basis.	**1 2 3 4**
3, Student maintains a clean area and follows guidelines for standard precautions.	**1 2 3 4**
Equipment Operation	
1. Student is able to manipulate tubes/tables in all rooms in an efficient manner.	**1 2 3 4**
2. Student demonstrates knowledge of various machine functions (fluoro, tomo, radiographic).	**1 2 3 4**
Radiation Protection	
1. Student uses gonadal shielding when appropriate.	**1 2 3 4**
2. Student inquires about possible pregnancy when patient is within child bearing age.	**1 2 3 4**
3. Student uses collimation when possible.	**1 2 3 4**
4. Student provides/wears protective lead apparel when appropriate.	**1 2 3 4**
Patient Positioning	
1. Student is able to properly position patients for routine exams.	**1 2 3 4**
2. Student is able to assess when patient's condition will necessitate an adjustment from routine guidelines (Scoliosis, etc.).	**1 2 3 4**
3. Student uses appropriate props such as sponges, sandbags, etc. to maintain patient position.	**1 2 3 4**
4. Student demonstrates confidence in his/her clinical abilities.	**1 2 3 4**

Exposure Factor Manipulation	
1. Student demonstrates an understanding of the difference between AEC and manual techniques.	**1 2 3**
2. Student comprehends and applies knowledge of additive/destructive disease processes when choosing exposure factors.	**1 2 3**
3. Student comprehends and applies knowledge of different IR types, grid/non-grid techniques when selecting exposure factors.	**1 2 3**
4. Student comprehends and applies knowledge of how distance affects exposure factor.	**1 2 3**
Evaluating Quality Radiographs	
1. Student takes pride in producing high quality radiographs.	**1 2 3**
2. Student is able to identify when technical factors necessitate a repeat exam and is able to manipulate these factors appropriately.	**1 2 3**
3. Student is able to identify when positioning is inadequate and is able to make the necessary adjustments to produce a quality image.	**1 2 3**
Maintaining Patient Records	
1. Student consistently checks request for patient history.	**1 2 3 4**
2. Student accurately and consistently abides by the facility's requirements for documentation.	**1 2 3 4**
3. Student constantly and accurately labels images with appropriate information (patient data) right vs. left, etc.	**1 2 3 4**
Initiative	
1. Student initiates and prepares for exam without being told to do so.	**1 2 3 4 5**
2. Student demonstrates persistence in getting job done.	**1 2 3 4 5**
3. Student shows interest in exams not yet observed by assisting technologist.	**1 2 3 4 5**
4. Student is able to work with direct/indirect supervision when completing exams.	**1 2 3 4 5**
5. Student uses slow times for clinical practice and didactic review.	**1 2 3 4 5**
Compliance	
1. Student wears appropriate uniform including name tag, rad badge, predominantly white shoes and is neat in appearance.	**1 2 3 4 5**
2. Student is consistently punctual for scheduled shifts.	**1 2 3 4 5**
3. Student uses allocated time off appropriately.	**1 2 3 4 5**
4. Student follows directions consistently.	**1 2 3 4 5**

Comments:

Evaluator Signature: _____ **Date:** _____

Clinical Site: _____

Minnesota State Community and Technical College
Radiologic Technology Program
Clinical III Weekly Evaluation

Student Name: _____

Rating Scale: 1 - The student **almost never** does this
2 - The student **sometimes** does this
3 - The student does this **at least 50%** of the time
4 - The student does this **at least 75%** of the time
5 - The student does this **at least 95%** of the time

Communication **1. Student explains the procedure to the patient in a concise manner and communicates/responds to patients in a polite and respectful manner.**	**1 2 3 4**
2. Communicates with physicians in a polite and respectful manner.	**1 2 3 4**
3. Communicates effectively with staff in a polite and respectful manner.	**1 2 3 4**
4. Communicates and responds to patients in a polite and respectful manner.	**1 2 3 4**
5. Student demonstrates a desire for success and accepts constructive feedback.	**1 2 3 4**
Patient Care	
1. Student demonstrates complete patient care skills.	**1 2 3 4**
2. Student is cognizant of patient comfort and responds to patient requests in a timely basis.	**1 2 3 4**
3, Student maintains a clean area and follows guidelines for standard precautions.	**1 2 3 4**
Equipment Operation	
1. Student is able to manipulate tubes/tables in all rooms in an efficient manner.	**1 2 3 4**
2. Student demonstrates knowledge of various machine functions (fluoro, tomo, radiographic).	**1 2 3 4**
Radiation Protection	
1. Student uses gonadal shielding when appropriate.	**1 2 3 4 5**
2. Student inquires about possible pregnancy when patient is within child bearing age.	**1 2 3 4 5**
3. Student uses collimation when possible.	**1 2 3 4 5**
4. Student provides/wears protective lead apparel when appropriate.	**1 2 3 4 5**
Patient Positioning	
1. Student is able to properly position patients for routine exams.	**1 2 3 4**
2. Student is able to assess when patient's condition will necessitate an adjustment from routine guidelines (Scoliosis, etc.).	**1 2 3 4**
3. Student uses appropriate props such as sponges, sandbags, etc. to maintain patient position.	**1 2 3 4**
4. Student demonstrates confidence in his/her clinical abilities.	**1 2 3 4**

Exposure Factor Manipulation	
1. Student demonstrates an understanding of the difference between AEC and manual techniques.	**1 2 3 4**
2. Student comprehends and applies knowledge of additive/destructive disease processes when choosing exposure factors.	**1 2 3 4**
3. Student comprehends and applies knowledge of different IR types, grid/non-grid techniques when selecting exposure factors.	**1 2 3 4**
4. Student comprehends and applies knowledge of how distance affects exposure factor.	**1 2 3 4**
Evaluating Quality Radiographs	
1. Student takes pride in producing high quality radiographs.	**1 2 3 4**
2. Student is able to identify when technical factors necessitate a repeat exam and is able to manipulate these factors appropriately.	**1 2 3 4**
3. Student is able to identify when positioning is inadequate and is able to make the necessary adjustments to produce a quality image.	**1 2 3 4**
Maintaining Patient Records	
1. Student consistently checks request for patient history.	**1 2 3 4**
2. Student accurately and consistently abides by the facility's requirements for documentation.	**1 2 3 4**
3. Student constantly and accurately labels images with appropriate information (patient data) right vs. left, etc.	**1 2 3 4**
Initiative	
1. Student initiates and prepares for exam without being told to do so.	**1 2 3 4 5**
2. Student demonstrates persistence in getting job done.	**1 2 3 4 5**
3. Student shows interest in exams not yet observed by assisting technologist.	**1 2 3 4 5**
4. Student is able to work with direct/indirect supervision when completing exams.	**1 2 3 4 5**
5. Student uses slow times for clinical practice and didactic review.	**1 2 3 4 5**
Compliance	
1. Student wears appropriate uniform including name tag, rad badge, predominantly white shoes and is neat in appearance.	**1 2 3 4 5**
2. Student is consistently punctual for scheduled shifts.	**1 2 3 4 5**
3. Student uses allocated time off appropriately.	**1 2 3 4 5**
4. Student follows directions consistently.	**1 2 3 4 5**

Comments:

Evaluator Signature: _____ **Date:** _____

Clinical Site: _____

Minnesota State Community and Technical College
Radiologic Technology Program
Clinical IV Weekly Evaluation

Student Name: _____

Rating Scale: 1 - The student **almost never** does this
2 - The student **sometimes** does this
3 - The student does this **at least 50%** of the time
4 - The student does this **at least 75%** of the time
5 - The student does this **at least 95%** of the time

Communication **1. Student explains the procedure to the patient in a concise manner and communicates/responds to patients in a polite and respectful manner.**	**1 2 3 4 5**
2. Communicates with physicians in a polite and respectful manner.	**1 2 3 4 5**
3. Communicates effectively with staff in a polite and respectful manner.	**1 2 3 4 5**
4. Communicates and responds to patients in a polite and respectful manner.	**1 2 3 4 5**
5. Student demonstrates a desire for success and accepts constructive feedback.	**1 2 3 4 5**
Patient Care	
1. Student demonstrates complete patient care skills.	**1 2 3 4 5**
2. Student is cognizant of patient comfort and responds to patient requests in a timely basis.	**1 2 3 4 5**
3, Student maintains a clean area and follows guidelines for standard precautions.	**1 2 3 4 5**
Equipment Operation	
1. Student is able to manipulate tubes/tables in all rooms in an efficient manner.	**1 2 3 4 5**
2. Student demonstrates knowledge of various machine functions (fluoro, tomo, radiographic).	**1 2 3 4 5**
Radiation Protection	
1. Student uses gonadal shielding when appropriate.	**1 2 3 4 5**
2. Student inquires about possible pregnancy when patient is within child bearing age.	**1 2 3 4 5**
3. Student uses collimation when possible.	**1 2 3 4 5**
4. Student provides/wears protective lead apparel when appropriate.	**1 2 3 4 5**
Patient Positioning	
1. Student is able to properly position patients for routine exams.	**1 2 3 4**
2. Student is able to assess when patient's condition will necessitate an adjustment from routine guidelines (Scoliosis, etc.).	**1 2 3 4**
3. Student uses appropriate props such as sponges, sandbags, etc. to maintain patient position.	**1 2 3 4**
4. Student demonstrates confidence in his/her clinical abilities.	**1 2 3 4**

Exposure Factor Manipulation	
1. Student demonstrates an understanding of the difference between AEC and manual techniques.	**1 2 3 4**
2. Student comprehends and applies knowledge of additive/destructive disease processes when choosing exposure factors.	**1 2 3 4**
3. Student comprehends and applies knowledge of different IR types, grid/non-grid techniques when selecting exposure factors.	**1 2 3 4**
4. Student comprehends and applies knowledge of how distance affects exposure factor.	**1 2 3 4**
Evaluating Quality Radiographs	
1. Student takes pride in producing high quality radiographs.	**1 2 3 4**
2. Student is able to identify when technical factors necessitate a repeat exam and is able to manipulate these factors appropriately.	**1 2 3 4**
3. Student is able to identify when positioning is inadequate and is able to make the necessary adjustments to produce a quality image.	**1 2 3 4**
Maintaining Patient Records	
1. Student consistently checks request for patient history.	**1 2 3 4 5**
2. Student accurately and consistently abides by the facility's requirements for documentation.	**1 2 3 4 5**
3. Student constantly and accurately labels images with appropriate information (patient data) right vs. left, etc.	**1 2 3 4 5**
Initiative	
1. Student initiates and prepares for exam without being told to do so.	**1 2 3 4 5**
2. Student demonstrates persistence in getting job done.	**1 2 3 4 5**
3. Student shows interest in exams not yet observed by assisting technologist.	**1 2 3 4 5**
4. Student is able to work with direct/indirect supervision when completing exams.	**1 2 3 4 5**
5. Student uses slow times for clinical practice and didactic review.	**1 2 3 4 5**
Compliance	
1. Student wears appropriate uniform including name tag, rad badge, predominantly white shoes and is neat in appearance.	**1 2 3 4 5**
2. Student is consistently punctual for scheduled shifts.	**1 2 3 4 5**
3. Student uses allocated time off appropriately.	**1 2 3 4 5**
4. Student follows directions consistently.	**1 2 3 4 5**

Comments:

Evaluator Signature: _____ **Date:** _____

Clinical Site: _____

Minnesota State Community and Technical College
Radiologic Technology Program
Clinical V Weekly Evaluation

Student Name: _____

Rating Scale: 1 - The student **almost never** does this
2 - The student **sometimes** does this
3 - The student does this **at least 50%** of the time
4 - The student does this **at least 75%** of the time
5 - The student does this **at least 95%** of the time

Communication **1. Student explains the procedure to the patient in a concise manner and communicates/responds to patients in a polite and respectful manner.**	**1 2 3 4 5**
2. Communicates with physicians in a polite and respectful manner.	**1 2 3 4 5**
3. Communicates effectively with staff in a polite and respectful manner.	**1 2 3 4 5**
4. Communicates and responds to patients in a polite and respectful manner.	**1 2 3 4 5**
5. Student demonstrates a desire for success and accepts constructive feedback.	**1 2 3 4 5**
Patient Care	
1. Student demonstrates complete patient care skills.	**1 2 3 4 5**
2. Student is cognizant of patient comfort and responds to patient requests in a timely basis.	**1 2 3 4 5**
3, Student maintains a clean area and follows guidelines for standard precautions.	**1 2 3 4 5**
Equipment Operation	
1. Student is able to manipulate tubes/tables in all rooms in an efficient manner.	**1 2 3 4 5**
2. Student demonstrates knowledge of various machine functions (fluoro, tomo, radiographic).	**1 2 3 4 5**
Radiation Protection	
1. Student uses gonadal shielding when appropriate.	**1 2 3 4 5**
2. Student inquires about possible pregnancy when patient is within child bearing age.	**1 2 3 4 5**
3. Student uses collimation when possible.	**1 2 3 4 5**
4. Student provides/wears protective lead apparel when appropriate.	**1 2 3 4 5**
Patient Positioning	
1. Student is able to properly position patients for routine exams.	**1 2 3 4 5**
2. Student is able to assess when patient's condition will necessitate an adjustment from routine guidelines (Scoliosis, etc.).	**1 2 3 4 5**
3. Student uses appropriate props such as sponges, sandbags, etc. to maintain patient position.	**1 2 3 4 5**
4. Student demonstrates confidence in his/her clinical abilities.	**1 2 3 4 5**

Exposure Factor Manipulation	
1. Student demonstrates an understanding of the difference between AEC and manual techniques.	**1 2 3 4 5**
2. Student comprehends and applies knowledge of additive/destructive disease processes when choosing exposure factors.	**1 2 3 4 5**
3. Student comprehends and applies knowledge of different IR types, grid/non-grid techniques when selecting exposure factors.	**1 2 3 4 5**
4. Student comprehends and applies knowledge of how distance affects exposure factor.	**1 2 3 4 5**
Evaluating Quality Radiographs	
1. Student takes pride in producing high quality radiographs.	**1 2 3 4 5**
2. Student is able to identify when technical factors necessitate a repeat exam and is able to manipulate these factors appropriately.	**1 2 3 4 5**
3. Student is able to identify when positioning is inadequate and is able to make the necessary adjustments to produce a quality image.	**1 2 3 4 5**
Maintaining Patient Records	
1. Student consistently checks request for patient history.	**1 2 3 4 5**
2. Student accurately and consistently abides by the facility's requirements for documentation.	**1 2 3 4 5**
3. Student constantly and accurately labels images with appropriate information (patient data) right vs. left, etc.	**1 2 3 4 5**
Initiative	
1. Student initiates and prepares for exam without being told to do so.	**1 2 3 4 5**
2. Student demonstrates persistence in getting job done.	**1 2 3 4 5**
3. Student shows interest in exams not yet observed by assisting technologist.	**1 2 3 4 5**
4. Student is able to work with direct/indirect supervision when completing exams.	**1 2 3 4 5**
5. Student uses slow times for clinical practice and didactic review.	**1 2 3 4 5**
Compliance	
1. Student wears appropriate uniform including name tag, rad badge, predominantly white shoes and is neat in appearance.	**1 2 3 4 5**
2. Student is consistently punctual for scheduled shifts.	**1 2 3 4 5**
3. Student uses allocated time off appropriately.	**1 2 3 4 5**
4. Student follows directions consistently.	**1 2 3 4 5**

Comments:

Evaluator Signature: _____ **Date:** _____

Clinical Site: _____

Minnesota State Community and Technical College
Radiologic Technology Program
Clinical VI Weekly Evaluation

Student Name: _____

Rating Scale: 1 - The student **almost never** does this
2 - The student **sometimes** does this
3 - The student does this **at least 50%** of the time
4 - The student does this **at least 75%** of the time
5 - The student does this **at least 95%** of the time

Communication **1. Student explains the procedure to the patient in a concise manner and communicates/responds to patients in a polite and respectful manner.**	**1 2 3 4 5**
2. Communicates with physicians in a polite and respectful manner.	**1 2 3 4 5**
3. Communicates effectively with staff in a polite and respectful manner.	**1 2 3 4 5**
4. Communicates and responds to patients in a polite and respectful manner.	**1 2 3 4 5**
5. Student demonstrates a desire for success and accepts constructive feedback.	**1 2 3 4 5**
Patient Care	
1. Student demonstrates complete patient care skills.	**1 2 3 4 5**
2. Student is cognizant of patient comfort and responds to patient requests in a timely basis.	**1 2 3 4 5**
3, Student maintains a clean area and follows guidelines for standard precautions.	**1 2 3 4 5**
Equipment Operation	
1. Student is able to manipulate tubes/tables in all rooms in an efficient manner.	**1 2 3 4 5**
2. Student demonstrates knowledge of various machine functions (fluoro, tomo, radiographic).	**1 2 3 4 5**
Radiation Protection	
1. Student uses gonadal shielding when appropriate.	**1 2 3 4 5**
2. Student inquires about possible pregnancy when patient is within child bearing age.	**1 2 3 4 5**
3. Student uses collimation when possible.	**1 2 3 4 5**
4. Student provides/wears protective lead apparel when appropriate.	**1 2 3 4 5**
Patient Positioning	
1. Student is able to properly position patients for routine exams.	**1 2 3 4 5**
2. Student is able to assess when patient's condition will necessitate an adjustment from routine guidelines (Scoliosis, etc.).	**1 2 3 4 5**
3. Student uses appropriate props such as sponges, sandbags, etc. to maintain patient position.	**1 2 3 4 5**
4. Student demonstrates confidence in his/her clinical abilities.	**1 2 3 4 5**

Exposure Factor Manipulation	
1. Student demonstrates an understanding of the difference between AEC and manual techniques.	**1 2 3 4 5**
2. Student comprehends and applies knowledge of additive/destructive disease processes when choosing exposure factors.	**1 2 3 4 5**
3. Student comprehends and applies knowledge of different IR types, grid/non-grid techniques when selecting exposure factors.	**1 2 3 4 5**
4. Student comprehends and applies knowledge of how distance affects exposure factor.	**1 2 3 4 5**
Evaluating Quality Radiographs	
1. Student takes pride in producing high quality radiographs.	**1 2 3 4 5**
2. Student is able to identify when technical factors necessitate a repeat exam and is able to manipulate these factors appropriately.	**1 2 3 4 5**
3. Student is able to identify when positioning is inadequate and is able to make the necessary adjustments to produce a quality image.	**1 2 3 4 5**
Maintaining Patient Records	
1. Student consistently checks request for patient history.	**1 2 3 4 5**
2. Student accurately and consistently abides by the facility's requirements for documentation.	**1 2 3 4 5**
3. Student constantly and accurately labels images with appropriate information (patient data) right vs. left, etc.	**1 2 3 4 5**
Initiative	
1. Student initiates and prepares for exam without being told to do so.	**1 2 3 4 5**
2. Student demonstrates persistence in getting job done.	**1 2 3 4 5**
3. Student shows interest in exams not yet observed by assisting technologist.	**1 2 3 4 5**
4. Student is able to work with direct/indirect supervision when completing exams.	**1 2 3 4 5**
5. Student uses slow times for clinical practice and didactic review.	**1 2 3 4 5**
Compliance	
1. Student wears appropriate uniform including name tag, rad badge, predominantly white shoes and is neat in appearance.	**1 2 3 4 5**
2. Student is consistently punctual for scheduled shifts.	**1 2 3 4 5**
3. Student uses allocated time off appropriately.	**1 2 3 4 5**
4. Student follows directions consistently.	**1 2 3 4 5**

Comments:

Evaluator Signature: _____ **Date:** _____

Clinical Site: _____

Guidelines for Overall Scores

	Clinical 1	Clinical 2	Clinical 3	Clinical 4
Communication	**4**	**4**	**4**	**5**
Patient Care	**3**	**4**	**4**	**5**
Equipment Operation	**3**	**4**	**4**	**5**
Radiation Protection	**3**	**4**	**5**	**5**
Patient Positioning	**3**	**4**	**4**	**4**
Exposure Factor Manipulation	**3**	**3**	**4**	**4**
Evaluating Quality Radiographs	**3**	**3**	**4**	**4**
Maintaining Patient Records	**3**	**4**	**4**	**5**
Initiative	**4**	**5**	**5**	**5**
Compliance	**5**	**5**	**5**	**5**
	34	**40**	**43**	**47**

****Students should be achieving at level 5 in all categories during Clinical 5 and 6****

MINNESOTA STATE COMMUNITY & TECHNICAL COLLEGE

Student Evaluation - Fluoroscopy

Student Name _____

Week of _____

Technologist: Please answer the following questions, in regards to this student's rotation with you in fluoroscopy.

Circle one: Comments are encouraged if a "no" answer applies.

1. The student initiated room set up prior to exam.
   Yes No

2. The student is/was able to explain exam to patient in a competent manner.
   Yes No

3. The student was prepared for routine procedures DURING the fluoroscopic procedure and *anticipated* the duties (i.e. when barium was needed) during the exam(s).
   Yes No

4. The student demonstrated an understanding of positioning for routine projections; this will vary according to his/her status in the program.
   Yes No

5. The student demonstrated an understanding of **sterile procedure** and/or **Universal Precautions.**
   Yes No

6. The student was able to manipulate fluoroscopic equipment in a competent manner.
   Yes No

7. Overall, this student's performance in fluoroscopy was: (circle one)

Needs improvement (1 pt) Fair (2 pts) Average (3 pts) Excellent (5 pts)

17 points total possible (2 pts/yes)

Any additional comments:

Technologist Signature: _____ Date: _____

MINNESOTA STATE COMMUNITY & TECHNICAL COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM
STUDENT EVALUATION FOR MODALITY ROTATION

Name: _____ **Date:** _____

Modality: _____

Communication:	
Communicates with the patient, staff and physicians in a manner that is respectful and courteous.	**1 2 3 4**
Patient Care:	
Provided the expected quality of patient care when called upon to do so.	**1 2 3 4**
Teamwork/Cooperation:	
Assists the technologists in work activities, was willing and cooperative when called upon.	**1 2 3 4**
Attendance/Time Management:	
Was on time for all shifts, checked with the assigned technologist before leaving the area.	**1 2 3 4**
Attitude Toward Learning:	
Was attentive and sought out opportunities to learn about the modality.	**1 2 3 4**
Personal Appearance:	
Wore the appropriate uniform with predominantly white shoes, name tag and radiation badge.	**1 2 3 4**

Comments:

Evaluator's Signature: _____ **Date:** _____

MINNESOTA STATE COMMUNITY & TECHNICAL COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM
Clinical Site Evaluation

Site being evaluated:_____ **Date:** _____

Rating Scale:

1	2	3	4	5
Never Describes the Site		Sometimes Describes the Site		Always Describes the Site

Communication:	
When first visiting the site the student is given an introductory tour of the radiology department.	**1 2 3 4 5**
Explains routines of exams to the student during first visit.	**1 2 3 4 5**
Radiologist and technologists communicate with the student in a polite manner.	**1 2 3 4 5**
Aids students in their desire for success and offers constructive criticism.	**1 2 3 4 5**
Equipment Operation	
When first visiting the site, various machine functions were explained thoroughly (including fluoro, tomo and portables).	**1 2 3 4 5**
Radiation Protection:	
The site provides all necessary protective lead apparel when appropriate.	**1 2 3 4 5**
Facility never asks a student to hold during an exposure.	**1 2 3 4 5**
Patient Positioning:	
Unusual positioning is explained to the student before performing an exam (e.g., special views that may not have been demonstrated in the lab setting).	**1 2 3 4 5**
Appropriate devices such as sponges, sandbags, etc. are available for student use.	**1 2 3 4 5**
Exposure Factor Manipulation:	
A technique chart is available for student use.	**1 2 3 4 5**
Evaluating Quality Radiographs:	
The site takes pride in producing quality radiographs and doesn't second-guess a student's decision to repeat a radiograph.	**1 2 3 4 5**
Maintaining Patient Records:	
When first visiting site, a clear explanation of all paperwork is provided to the student.	**1 2 3 4 5**
Initiative:	
The student is sought out and told when a patient arrives for an exam (e.g., the student is in the file room and is unaware that a patient has arrived).	**1 2 3 4 5**
When a student is practicing during slow times and a question arises, a technologist is willing to provide an answer to the best of his or her knowledge.	**1 2 3 4 5**
Compliance:	
The student felt at ease around the technologist and other employees.	**1 2 3 4 5**
Time spent at this facility was worthwhile and an integral part of my overall clinical experience.	**1 2 3 4 5**

MINNESOTA STATE COMMUNITY & TECHNICAL COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM
Clinical Instructor Evaluation

Instructor being evaluated: _____

Semester: _____

Rating Scale:

1	2	3	4	5
Never Describes the Instructor		Sometimes Describes the Instructor		Always Describes the Instructor

1. Has a good attitude when working with students.	1 2 3 4 5
2. Was approachable and helpful.	1 2 3 4 5
3. Stimulated and challenged me to think.	1 2 3 4 5
4. Asked me pertinent questions.	1 2 3 4 5
5. Helped me relate course work to clinical practice.	1 2 3 4 5
6. Offered me positive feedback when appropriate.	1 2 3 4 5
7. Offered me an initial orientation.	1 2 3 4 5
8. Provided adequate supervision.	1 2 3 4 5
9. Discussed my evaluation with me.	1 2 3 4 5
10. Encouraged me to think outside of the box and apply critical thinking skills.	1 2 3 4 5
11. Operated in accordance with standards set forth by ARRT, ASRT and JRCERT.	1 2 3 4 5

Student Comments:

MINNESOTA STATE COMMUNITY & TECHNICAL COLLEGE

RADIOLOGIC TECHNOLOGY PROGRAM
STUDENT ABSENCE REPORT FORM

Today's Date: _____

Student Name: _____

Day(s) Absent: _____

Total Hours Absent: _____
**Note: CTO hours must be taken in increments of at least one half hour.

Reason for absence:

_____

_____

_____

_____

I verify that the above information is true and correct.

Student Signature: _____

This form must be submitted to the clinical course instructor on or before absence.

***A planned absence must be pre-approved by the clinical course instructor. The student is responsible for notifying the clinical instructor (CI) at the site they are assigned to.

***This form is for the purpose of maintaining attendance records of required clinical hours.

Filling out a Clinical Competency Form Instructions

Clinical instructors will be using evaluation forms when students are being evaluated on a competency completion. After this evaluation the student should be competent to perform this exam under indirect supervision. These forms will also be used for spot checks.

These forms have two columns: a procedure column and a competency column. The procedure column will be used when the student tests out in the lab, and the competency column will be used by clinical sites when the student is ready to sign off on an exam and thus work under indirect supervision and for spot checks.

Each evaluation form has several sections. In each section there are several criteria the student must meet. To indicate if the student meets the criteria, you will circle either yes or no.

If the student meets the criteria, circle yes. The student will receive full credit for this criterion.

If the student does not meet the criteria, circle no. The student will receive no credit for this criterion.

If the student needs a subtle reminder to meet the criteria, circle yes and no. The student will receive partial credit for this criterion.
Example: If you see something the student has forgotten before an exposure is made, prompt the student by asking, "Are you forgetting something?" If the student realizes his or her error without delay, circle both yes and no, and partial credit will be awarded. If the student does not correct the error, circle no.

If the student does not need to perform one of the criteria, cross out both yes and no. This criterion will then be deducted from the total possible.
Example: If it is a male patient, the student will not need to ask about pregnancy.

The student cannot use the exam as a competency completion if he or she gets more than two no's on the evaluation. This policy does not apply to spot checks.

If a student fails to ask a female patient with reasonable reproductive potential if there is a chance of pregnancy or if he or she fails to collect pertinent information from the patient (obtain a history), it is an automatic failure and the evaluation needs to be attempted again with another patient.

You are not responsible for assessing a grade. We will complete that process.

Please sign and date the evaluation form and make any comments that would be helpful.

2018-2020 COMPETENCY COMPLETION CHECKLIST

Student:

Listed below are the exams that students are required to complete prior to graduation date. Students are required to complete the exams prior to the expected due date. *****Demonstration of competencies includes requisition evaluation, patient assessment, room preparation, patient management, equipment operation, technique selection, positioning skills, radiation safety, image processing, and image evaluation.**

Examination	Due Date	Mandatory/Elective	Completion Date	Verified by:
Abdomen				
Upright	End of Clinical II	**Mandatory-ARRT**		
Decubitus	Prior to Graduation	Elective-ARRT		
Supine/KUB	End of Clinical I	**Mandatory-ARRT**		
Intravenous Urography	Prior to Graduation	Elective-ARRT		
Chest and Thorax				
Chest Routine (PA and Lateral)	End of Clinical I	**Mandatory-ARRT**		
AP (Wheelchair or Stretcher)	End of Clinical IV	**Mandatory-ARRT**		
Lateral Decubitus	Prior to Graduation	Elective-ARRT		
Sternum (Oblique and Lateral)	Prior to Graduation	Elective-ARRT		
Ribs	End of Clinical V	**Mandatory-ARRT**		
Soft Tissue Neck/Upper Airway	Prior to Graduation	Elective-ARRT		
Upper Extremity				
Thumb or Finger (PA, Oblique, Lateral)	End of Clinical II	**Mandatory-ARRT**		
Hand (PA, Oblique, Lateral)	End of Clinical I	**Mandatory-ARRT**		
Wrist (PA, Oblique, Lateral)	End of Clinical II	**Mandatory-ARRT**		
Forearm (AP and Lateral)	End of Clinical V	**Mandatory-ARRT**		
Elbow (PA, Oblique, Lateral)	End of Clinical II	**Mandatory-ARRT**		
Humerus (AP and Lateral)	End of Clinical IV	**Mandatory-ARRT**		
Shoulder-Routine (PA, Oblique, Axillary)	End of Clinical II	**Mandatory-ARRT**		
Shoulder-Trauma (Scapular Y, Transthoracic or axillary)*	Prior to Graduation	**Mandatory-ARRT**		
A/C Joints	Prior to Graduation	Elective-ARRT		
Clavicle (AP and Axial)	Prior to Graduation	**Mandatory-ARRT**		
Scapula (AP and Lateral)	Prior to Graduation	Elective-ARRT		
Trauma Upper Extremity (non-shoulder)*	End of Clinical V	**Mandatory-ARRT**		
Lower Extremity				
Toes (AP, Oblique, Lateral)	End of Clinical V	Elective-ARRT		
Foot (AP, Oblique, Lateral)	End of Clinical II	**Mandatory-ARRT**		
Ankle (AP, Oblique, Lateral)	End of Clinical II	**Mandatory-ARRT**		
Calcaneus (Os Calsis)	End of Clinical V	Elective-ARRT		
Tibia/Fibula (AP and Lateral)	End of Clinical III	**Mandatory-ARRT**		
Knee-Routine (AP, Oblique, Lateral)	End of Clinical II	**Mandatory-ARRT**		
Patella (1 view)	End of Clinical II	Elective-ARRT		

Femur (AP and Lateral)	Prior to Graduation	**Mandatory-ARRT**		
Trauma Lower Extremity*	End of Clinical V	**Mandatory-ARRT**		
Fluoroscopy Studies: Candidate must select either UGI or BE plus one other elective procedure from this section				
Small Bowel (AP/PA)	Prior to Graduation	Elective-ARRT		
Barium Enema-Single or Double Contrast (AP/PA, Oblique, Lateral, Axial or Decub)	End of Clinical VI	Elective-ARRT		
UGI-Single or Double Contrast (PA, Oblique and Lateral)	End of Clinical VI	Elective-ARRT		
Esophagram (AP/PA and Lateral)	Prior to Graduation	Elective-ARRT		
Cystogram/Cystourethrogram	Prior to Graduation	Elective-ARRT		
Arthrogram	Prior to Graduation	Elective-ARRT		
ERCP	Prior to Graduation	Elective-ARRT		
Myelogram	Prior to Graduation	Elective-ARRT		
Hysterosalpingography	Prior to Graduation	Elective-ARRT		
Spine and Pelvis				
Cervical-Routine (AP, Oblique, Lateral)	End of Clinical IV	**Mandatory-ARRT**		
Cross-Table (Horizontal Beam) Lateral Spine	Prior to Graduation	**Mandatory-ARRT**		
Thoracic-Routine (AP and Lateral)	End of Clinical IV	**Mandatory-ARRT**		
Lumbar-Routine (AP, Oblique, Lateral)	End of Clinical III	**Mandatory-ARRT**		
Sacrum and/or Coccyx (AP and Lateral)	Prior to Graduation	Elective-ARRT		
Sacroiliac Joints (Axial and Oblique)	Prior to Graduation	Elective-ARRT		
Scoliosis Series	Prior to Graduation	Elective-ARRT		
Hip (AP and Lateral)	End of Clinical II	**Mandatory-ARRT**		
Cross-Table (Horizontal beam) Lateral Hip	End of Clinical VI	**Mandatory-ARRT**		
Pelvis	End of Clinical II	**Mandatory-ARRT**		
Head: Candidate must select at least one elective procedure from this section				
Facial Bones (AP/PA and Lateral)	Prior to Graduation	Elective-ARRT		
Nasal Bones (AP/PA and Lateral)	Prior to Graduation	Elective-ARRT		
Paranasal Sinuses (AP/PA and Lateral)	End of Clinical V	Elective-ARRT		
Skull-Routine (AP/PA and Lateral)	Prior to Graduation	Elective-ARRT		
Orbits (AP/PA and Lateral)	Prior to Graduation	Elective-ARRT		
Zygomatic Arches	Prior to Graduation	Elective-ARRT		
Mandible	Prior to Graduation	Elective-ARRT		
Tempromandibular Joints	Prior to Graduation	Elective-ARRT		
Mobile Studies				
Abdomen	End of Clinical VI	**Mandatory-ARRT**		
Chest	End of Clinical III	**Mandatory-ARRT**		

Orthopedic	End of Clinical IV	**Mandatory-ARRT**		
Pediatrics (age 6 or younger)				
Routine Chest (PA and Lateral)	End of Clinical V	**Mandatory-ARRT**		
Abdomen	Prior to Graduation	Elective-ARRT		
Upper Extremity	Prior to Graduation	Elective-ARRT		
Lower Extremity	Prior to Graduation	Elective-ARRT		
Mobile Pediatric Exam	Prior to Graduation	Elective-ARRT		
Geriatric Patient (Physically or cognitively impaired as a result of aging)				
Chest Routine (PA and Lateral)	End of Clinical III	**Mandatory-ARRT**		
Upper Extremity	Prior to Graduation	**Mandatory-ARRT**		
Lower Extremity	Prior to Graduation	**Mandatory-ARRT**		
Mobile C-Arm Studies				
C-arm (requiring manipulation to obtain more than one projection)	End of Clinical VI	**Mandatory-ARRT**		
Surgical C-arm procedure (requiring manipulation around a sterile field)	Prior to Graduation	**Mandatory-ARRT**		
General Patient Care-These are not included in the count for mandatory or elective competencies.				
CPR	Prior to Radiographic Clinical I	**Mandatory-ARRT**		
Vital Signs-Blood Pressure, Pulse, Respiration, Pulse Oximetry, Temperature	End of Clinical IV	**Mandatory-ARRT**		
Sterile and Medical Aseptic Technique	End of Clinical IV	**Mandatory-ARRT**		
Venipuncture	Prior to Graduation	**Mandatory-ARRT**		
Transfer of Patient	End of Clinical IV	**Mandatory-ARRT**		
Care of Patient Medical Equipment (e.g. oxygen tank, IV tubing)	End of Clinical IV	**Mandatory-ARRT**		

Students must complete the required # of competencies (typically 4) before gaining competency completion. These exams are kept track of by the student in the blue log book. When competency completion is achieved the student can work under indirect supervision.

*Trauma is considered a serious injury or shock to the body. Modifications may include variations in positioning, minimal movement of the body part, etc.

Competency evaluations must be performed in the presence of a Registered Technologist.

All ARRT **mandatory exams must be completed. Twenty-nine (29) of the 37 ARRT mandatory must be demonstrated on patients (not phantoms or simulated), the remaining 8 can be performed on phantoms or simulated.** General patient care exams are not included in the 37 mandatory exams.

Fifteen (15) of the 34 ARRT **electives must also be demonstrated. However, these can be on patients, phantoms or as simulations.

This form will be initialed by program director or clinical coordinator at various times during the program. It must correspond to the student's blue book.

One elective procedure must be from the head section and 2 must be from the GI section, one of them being a BE or UGI.

The student has demonstrated the competency requirements as identified above.

Program Director/Clinical Coordinator	Date	Student	Date

Revised: 6/25/19

Clinical Competency Completion Chart

	Examination					
	Abdomen					
M	Upright	1	2	3	4	Competent
E	Decub	1	2			Competent
M	Supine (KUB)	1	2	3	4	Competent
E	IVU	1	2			Competent
	Chest and Thorax					
M	PA and LAT	1	2	3	4	Competent
M	Wheelchair	1	2	3	4	Competent
M	Stretcher	1	2	3	4	Competent
E	Decub	1	2			Competent
E	Sternum	1	2			Competent
M	Ribs	1	2	3	4	Competent
E	Soft tissue neck	1	2			Competent
	Upper Extremity					
M	Finger/Thumb	1	2	3	4	Competent
M	Hand	1	2	3	4	Competent
M	Wrist	1	2	3	4	Competent
M	Forearm	1	2	3	4	Competent
M	Elbow	1	2	3	4	Competent
M	Humerus	1	2	3	4	Competent
M	Shoulder	1	2	3	4	Competent
M	Shoulder trauma (scap.Y)	1	2	3	4	Competent
E	A/C Joints	1	2	3		Competent
M	Clavicle	1	2	3		Competent
E	Scapula	1	2			Competent
M	Trauma Upper ext.	1	2	3		Competent
	Lower Extremity					
E	Toes	1	2			Competent
M	Foot	1	2	3	4	Competent
M	Ankle	1	2	3	4	Competent
E	Calcaneus	1	2	3		Competent
M	Tibia/Fibula	1	2	3	4	Competent
M	Knee	1	2	3	4	Competent
E	Patella	1	2	3	4	Competent
M	Femur	1	2	3	4	Competent
M	Trauma lower ext.	1	2	3	4	Competent
	Fluoroscopy Studies					
E	Small Bowel	1	2	3	4	Competent
E	BE Single or Double Contrast	1	2	3	4	Competent
E	UGI-Single or Double	1	2	3	4	Competent
E	Esophagram	1	2	3		Competent
E	Cystogram	1	2			Competent
E	Arthrogram	1	2			Competent
E	ERCP	1	2			Competent
E	Myelogram	1	2			Competent
E	Hysterosalpingography	1	2			Competent

	Examination					
	Spine and Pelvis					
M	Cervical-Routine	1	2	3	4	Competent
M	Cervical-Cross-Table Lateral	1	2	3		Competent
M	Thoracic	1	2	3	4	Competent
M	Lumbar	1	2	3	4	Competent
E	Sacrum/Coccyx	1	2			Competent
E	SI Joints	1	2			Competent
E	Scoliosis	1	2			Competent
M	Hip	1	2	3	4	Competent
M	Trauma Hip	1	2	3	4	Competent
M	Pelvis	1	2	3	4	Competent
	Head					
E	Facial Bones	1	2			Competent
E	Nasal Bones	1	2			Competent
E	Paranasal Sinuses	1	2			Competent
E	Skull	1	2			Competent
E	Orbits	1	2			Competent
E	Zygomatic Arches	1	2			Competent
E	Mandible	1	2			Competent
E	TMJ	1	2			Competent
	Mobile					
M	Abdomen	1	2			Competent
M	Chest	1	2	3	4	Competent
M	Orthopedic	1	2			Competent
	Pediatrics					
M	Chest	1	2	3		Competent
E	Abdomen	1	2	3		Competent
E	Upper Ext.	1	2	3		Competent
E	Lower Ext.	1	2	3		Competent
E	Mobile Peds exam	1	2			Competent
	Geriatrics					
M	Chest	1	2	3		Competent
M	Upper Ext.	1	2	3		Competent
M	Lower Ext.	1	2	3		Competent
	Mobile C-Arm					
M	C-arm 2 projections	1	2	3		Competent
M	C-arm sterile field	1	2	3		Competent
	Patient Care					
	Vital Signs					
M	Blood Pressure	1				Competent
M	Temperature	1				Competent
M	Pulse	1				Competent
M	Respiration	1				Competent
M	Pulse Oximetry	1				Competent
M	Sterile and Aseptic Technique	1				Competent
M	Venipuncture	1				Competent
M	Patient Transfer	1				Competent
M	Care of Medical Equipment	1				Competent

Radiography

1. Introduction

Candidates for certification and registration are required to meet the Professional Education Requirements specified in the *ARRT Rules and Regulations*. *ARRT's Radiography Didactic and Clinical Competency Requirements* are one component of the Professional Education Requirements.

The requirements are periodically updated based upon a practice analysis which is a systematic process to delineate the job responsibilities typically required of radiographers. The result of this process is a task inventory which is used to develop the clinical competency requirements (see section 4 below) and the content specifications which serve as the foundation for the didactic competency requirements (see section 3 below) and the examination.

2. Documentation of Compliance

To document that the Didactic and Clinical Competency Requirements have been satisfied by a candidate, the program director (and authorized faculty member if required) must sign the ENDORSEMENT SECTION of the *Application for Certification and Registration* included in the *Certification and Registration Handbook*.

Candidates who complete their educational program during 2017 or 2018 may use either the 2012 Didactic and Clinical Competency Requirements or the 2017 requirements. Candidates who complete their educational program after December 31, 2018 must use the 2017 requirements.

3. Didactic Competency Requirements

The purpose of the didactic competency requirements is to verify that individuals had the opportunity to develop fundamental knowledge, integrate theory into practice and hone affective and critical thinking skills required to demonstrate professional competency. Candidates must successfully complete coursework addressing the topics listed in the ARRT Content Specifications for the Radiography Examination. These topics would typically be covered in a nationally-recognized curriculum such as the ASRT Radiography Curriculum. Educational programs accredited by a mechanism acceptable to ARRT generally offer education and experience beyond the minimum requirements specified here.

4. Clinical Competency Requirements

The purpose of the clinical competency requirements is to verify that individuals certified and registered by the ARRT have demonstrated competency performing the clinical activities fundamental to a particular discipline. Competent performance of these fundamental activities, in conjunction with mastery of the cognitive knowledge and skills covered by the radiography examination, provides the basis for the acquisition of the full range of procedures typically required in a variety of settings. Demonstration of clinical competence means that the candidate has performed the procedure independently, consistently, and effectively during the course of his or her formal education. The following pages identify the specific procedures for the 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.

4.1 General Performance Considerations

4.1.1 Patient Diversity

Demonstration of competence should include variations in patient characteristics such as age, gender, and medical condition.

4.1.2 Simulated Performance

The ARRT requirements specify that certain clinical procedures may be simulated as designated in the specific requirements below. Simulations must meet the following criteria:

- The candidate must simulate the procedure on another person with the same level of cognitive, psychomotor, and affective skills required for performing the procedure on a patient. Examples of acceptable simulation include positioning another person 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 suitable device;
- The program director must be confident that the skills required to competently perform the simulated procedure will transfer to the clinical setting, and, if applicable, the candidate must evaluate related images.

4.1.3 Elements of Competence

Demonstration of clinical competence requires that the program director or the program director's designee has observed the candidate performing the procedure independently, consistently, and effectively during the course of the candidate's formal educational program.

4.2 Radiography-Specific Requirements

As part of the educational program, candidates must demonstrate competence in the clinical activities identified below:

- Ten mandatory general patient care activities;
- 37 mandatory imaging procedures;
- 5 elective imaging procedures selected from a list of 34 procedures;
- One of the 15 elective imaging procedures must be selected from the head section; and
- Two of the 15 elective imaging procedures must be selected from the fluoroscopy studies section, one of which must be either upper GI or contrast enema.

These clinical activities are listed in more detail in the following sections.

4.2.1 General Patient Care

Candidates must be CPR certified and demonstrate competence in the remaining nine patient care activities listed below. The activities should be performed on patients whenever possible, but simulation is acceptable.

General Patient Care Procedures	Date Completed	Competence Verified By
CPR Certified		
Vital Signs - Blood Pressure		
Vital Signs - Temperature		
Vital Signs - Pulse		
Vital Signs - Respiration		
Vital Signs - Pulse Oximetry		
Sterile and Medical Aseptic Technique		
Venipuncture		
Transfer of Patient		
Care of Patient Medical Equipment (e.g., Oxygen Tank, IV Tubing)		

4.2.2 Imaging Procedures

Candidates must demonstrate competence in all 37 procedures identified as mandatory. Procedures should be performed on patients whenever possible. A maximum of eight mandatory procedures may be simulated if demonstration on patients is not feasible.

Candidates must demonstrate competence in 15 of the 34 elective procedures. Candidates must select at least one of the 15 elective procedures from the head section. Candidates must select either upper GI or contrast enema plus one other elective from the fluoroscopy section as part of the 15 electives. Elective procedures should be performed on patients whenever possible. If demonstration on patients is not feasible, electives may be simulated.

Institutional protocol will determine the positions and projections used for each procedure.

Demonstration of competence must include:

- patient identity verification
- examination order verification;
- patient assessment;
- room preparation;
- patient management;
- equipment operation;
- technique selection;
- patient positioning;
- radiation safety;
- imaging processing; and
- image evaluation.

4.2.2 Imaging Procedures (continued)

Imaging Procedures	Mandatory or Elective		Date Completed	Patient or Simulated	Competence Verified By
Chest and Thorax	Mandatory	Elective			
Chest Routine					
Chest AP (Wheelchair or Stretcher)					
Ribs					
Chest Lateral Decubitus					
Sternum					
Upper Airway (Soft-Tissue Neck)					
Upper Extremity					
Thumb or Finger					
Hand					
Wrist					
Forearm					
Elbow					
Humerus					
Shoulder					
Trauma: Shoulder or Humerus (Scapular Y, Transthoracic or Axial)*					
Clavicle					
Scapula					
AC Joints					
Trauma: Upper Extremity (Non Shoulder)*					
Lower Extremity					
Toes					
Foot					
Ankle					
Knee					
Tibia-Fibula					
Femur					
Trauma: Lower Extremity*					
Patella					
Calcaneus					

* Trauma is considered a serious injury or shock to the body and requires modifications in positioning and monitoring of the patient's condition.

4.2.2 Imaging Procedures (continued)

Imaging Procedures	Mandatory or Elective		Date Completed	Patient or Simulated	Competence Verified By
Head - Candidates must select at least one elective procedure from this section.	Mandatory	Elective			
Skull					
Paranasal Sinuses					
Facial Bones					
Orbits					
Zygomatic Arches					
Nasal Bones					
Mandible					
Temporomandibular Joints					
Spine and Pelvis					
Cervical Spine					
Thoracic Spine					
Lumbar Spine					
Cross-Table (Horizontal Beam) Lateral Spine					
Pelvis					
Hip					
Cross-Table (Horizontal Beam) Lateral Hip					
Sacrum and/or Coccyx					
Scoliosis Series					
Sacroiliac Joints					
Abdomen					
Abdomen Supine (KUB)					
Abdomen Upright					
Abdomen Decubitus					
Intravenous Urography					

4.2.2 Imaging Procedures (continued)

Imaging Procedures	Mandatory or Elective				
Fluoroscopy Studies - Candidates must select either upper GI or contrast enema plus one other elective procedure from this section.	Mandatory	Elective	Date Completed	Patient or Simulated	Competence Verified By
Upper GI Series, Single or Double Contrast					
Contrast Enema, Single or Double Contrast					
Small Bowel Series					
Esophagus					
Cystography/Cystourethrography					
ERCP					
Myelography					
Arthrography					
Hysterosalpingography					
Mobile C-Arm Studies					
C-Arm Procedure (Requiring Manipulation to Obtain More Than One Projection)					
Surgical C-Arm Procedure (Requiring Manipulation Around a Sterile Field)					
Mobile Radiographic Studies					
Chest					
Abdomen					
Orthopedic					
Pediatric Patient (Age 6 or Younger)					
Chest Routine					
Upper Extremity					
Lower Extremity					
Abdomen					
Mobile Study					
Geriatric Patient (At Least 65 Years Old and Physically or Cognitively Impaired as a Result of Aging)					
Chest Routine					
Upper Extremity					
Lower Extremity					