TRINITY HOSPITAL

SCHOOL OF RADIOLoGIC TECHNOLOGY

Minot, North Dakota
# Trinity Hospital School of Radiologic Technology
Minot, North Dakota

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This booklet is intended to provide information about the education and policies of the Trinity School of Radiologic Technology. Although this booklet is updated biennially, due to the rapidly changing nature of health care, some of the information may outdate prior to published updates. The school reserves the right to add to and amend its policies, procedures and curriculum as necessary to insure the quality of the educational program and its continued accreditation.

To request a comprehensive copy of all school policies, send request to Trinity Hospital School of Radiologic Technology, P.O. Box 5020, Minot, ND 58702-5020.
THE CAREER

Radiologic Technology is a science combining advanced technology and human compassion. Radiologic Technologists (radiographers) use their knowledge of physics and human anatomy to create permanent medical images to diagnose disease. The radiologic technologist is qualified to provide patient services using various types of imaging equipment. The radiologic technologist works under the direction of a Radiologist — a medical physician with extensive training in performing radiologic procedures and interpreting medical images. This is a profession which requires a dependable personality with a mature, caring nature and an ability to exercise independent judgment.

TRINITY HEALTH

Founded in 1922, Trinity Health is a not-for-profit, integrated healthcare system serving North Dakota and Eastern Montana. With three hospitals, 15 clinics, two nursing homes and a regional eyecare network, Trinity Health provides comprehensive, leading-edge care to Minot and the surrounding region.

Trinity’s primary hospital campus is accredited by The Joint Commission (TJC) and the region’s only Level II Trauma Center. Trinity offers a state-of-art cancer care center, comprehensive heart services, including open heart surgery, and advanced neurosurgical care.

Trinity Health is staffed by more than 2,400 physicians, nurses and other healthcare professionals. Trinity Medical Group is a regional network of more than 150 physicians and allied health professionals representing over 40 primary care and specialty services.

A teaching hospital, Trinity sponsors the University of North Dakota School of Medicine residency program as well as the Trinity Hospital School of Radiologic Technology.
TRINITY HOSPITAL SCHOOL OF RADIOLOGIC TECHNOLOGY

The school of radiologic technology has an excellent reputation of graduating professional Radiologic Technologists (Radiographers) of high academic excellence and above average entry level technical skills. Our graduates typically score above the 90th percentile on the American Registry of Radiologic Technology (ARRT) national registry exam to become certified Radiographers.

The school is a two-year certificate program accredited by the Joint Review Commission on Education in Radiologic Technology (JRCERT), 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182, (312) 704-5300, (website: www.jrcert.org) (e-mail: jrcert@mail.idt.net). For more information contact the Program Director at phone number: (701) 857-5620 or mailing address: Trinity Hospital School of Radiologic Technology, P.O. Box 5020, Minot, ND 58702-5020. Additional Information can be found on the program website, www.trinityhealth.org/radiology_school

The school accepts a 4–6 students each year. Classes begin the in July and concludes with graduation in June. The 24 month Program operates on a schedule of three semesters per year. The school week runs from Sunday through Saturday. The student will complete six consecutive semesters during their internship, including a limited number of weekend and evening clinical rotations. Time spent in weekend and evening assignment rotations will not exceed 25% of the students total clinical clock hours.

The Trinity Hospital School of Radiologic Technology is an outcome-based educational program with the primary focus on competency achieved through a mastery learning system. Integration of classroom and clinical education is also an important element to the success of the school and its graduates. The student benefits from hospital and clinic radiology patient care environments, state-of-art imaging equipment, highly skilled staff of Registered Technologists, a small enrollment and educators with years of teaching experience. The clinical experience is designed to maximize patient contact in performance of radiography procedures. All students are supervised while in their clinical training by ARRT registered and JRCERT approved Clinical Instructors. Upon completion of this program, graduates will be eligible to take the ARRT registry exam and upon successful completion, be recognized as professional, competent entry level Radiographers.
MISSION STATEMENT AND GOALS

MISSION STATEMENT:

The mission of Trinity Hospital School of Radiologic Technology is to provide quality education in the art and science of radiologic technology. The program is designed to prepare knowledgeable and caring professionals and thereby graduate competent, entry-level radiographers ready to demonstrate high clinical and technical competence in serving their patients, the healthcare community and the profession.

ACHIEVEMENT OF GOALS and COMPETENCIES:

To accomplish established goals we believe correlation of didactic and clinical education must exist, so that through mastery of skills and competency based education, the student will learn to function decisively, independently and professionally.

The following COMPETENCIES have been established as essential for the technologist to function effectively in a modern health care system. These competencies have a multifold purpose as a working structural model for our program, serving as:

- A curriculum guide
- A guideline to develop performance indicators for clinical and didactic courses
- Criteria for measuring student learning outcomes, through testing and grading

COMPETENCY # 1

Apply the knowledge of the principles of x-ray production and appropriate usage of radiation production equipment to provide safety for the patient, themselves and other health care professionals.

COMPETENCY # 2

Apply knowledge of anatomy, physiology, pathology and positioning to accurately demonstrate structures on radiographic images.

COMPETENCY # 3

Determine proper exposure factors which will achieve optimum radiographic quality and minimize radiation exposure.
COMPETENCY # 4
Examine radiographic images for the purpose of making judgmental decisions concerning accuracy in demonstrating anatomical and pathological structures, technical factors, and radiation protection aspects.

COMPETENCY # 5
Provide appropriate patient care.

COMPETENCY # 6
Understand and apply knowledge of healthcare organizational structure, principles of communication and human interactions in the medical domain.

PROGRAM GOALS AND STUDENT LEARNING OUTCOMES

Goal: Students will demonstrate clinical competency. Students will apply knowledge of the principles of x-ray production and demonstrate competency in operating related equipment. Students will apply knowledge of anatomy, physiology, pathology and positioning to accurately demonstrate structures in radiologic exams. Students will practice/apply appropriate radiation protection.

Goal: Students will demonstrate critical thinking and problem solving skills. Students will demonstrate the ability to make decisions and use independent judgment. Students will demonstrate the ability to determine proper exposure factors for optimum radiographic quality and maintain radiation protection concepts. Students will evaluate the quality of images.

Goal: Student will demonstrate effective communication skills. Student will demonstrate effective written and verbal communication skills with patients and healthcare staff. Students will provide patient education relate to radiographic
procedures and radiation protection.

Goal: **Students will demonstrate professional development.**
Student will demonstrate professional, ethical behavior as a radiographer.
Student will demonstrate understanding of healthcare organization structure, principles of communication and human interaction in the medical domain.
Students will prepare to enter the profession as a Registered Radiographer committed to professional development.

**ADMISSION REQUIREMENTS**

The radiologic technology program has the capacity to accept 4–6 students per year.

The school does not admit transfer students, offer advance placement or accommodate part time students.

The school does not discriminate on the basis of race, religion, color, age, national origin, handicap, sex, marital status, veteran status, or any other status or condition protected by applicable state or federal laws. However, the school reserves the right to admit only those applicants who meet minimum requirements for age, education, personal and physical skills.

**MINIMUM REQUIREMENTS**

**AGE:**
- Applicants must be at least 18 years of age.

**EDUCATION:**

Admission preference is given to applicants who already possess an associates or baccalaureate degree or students who will be granted a degree by an accredited university upon successful completion of this program. Effective January 1, 2015 the American Registry in Radiologic Technology (ARRT), the only certifying agency in the US, requires candidates to possess a degree and identify such on their certification application.

- Required General Education
- Prerequisite Post Secondary Credit-Bearing Courses:
  - anatomy and physiology series (2 courses)
– medical terminology (1 course)
– mathematical/logical reasoning (1 course)
– natural sciences (1 course)
– chemistry or biology (2 courses)
– physics series (2 courses)
– written/oral communications (1 course)
– composition (1 course)
– arts and humanities (1 course)
– information systems (1 course)
– social behavioral science psychology (1 course)

• GPA. Applicants must have achieved a minimum cumulative grade point average of 2.75 in college/university course work at the time of application.

PHYSICAL DEMANDS
Applicants must possess the following physical skills to participate in the program and to meet the physical demands as a radiologic technologist:
• fine and gross motor coordination to respond promptly, manipulate equipment
• clear verbal and written skills to communicate needs promptly and effectively in English
• normal hearing to assess patient needs and communicate verbally with other health care providers
• good visual acuity to observe patients, manipulate equipment and evaluate radiographic quality
• ability to accomplish moderate lifting, minimum of thirty pounds and ensure patient safety
• satisfactory intellectual and emotional functions to exercise independent judgement and discretion in the safe technical performance of medical imaging procedures.

This will be assessed and documented by the applicant during the interview process. All applicants who are ACCEPTED into the program will be required to document possession of these physical requirements by Licensed Independent Practitioner on a physical fitness form provided by the School.
PERSONAL REQUIREMENTS
Applicants to the school of radiology must be of good moral character, including:

- absolute integrity of performance
- ability to reason and exercise good independent judgment
- ability to work under stress
- ability to organize and meet deadlines
- professional discretion with confidential information
- ability to communicate effectively with hospital personnel and patients

These requirements are assessed by the application, personal references and personal interview.

The ARRT subscribes to Rules of Ethics that require all applicants for certification to be of good moral character. Generally, the conviction of a crime or any felony or any crime involving moral turpitude may indicate a lack of good moral character and may render the person ineligible to take the certification exam. Violations of academic honor codes and suspension or dismissal from an educational program may also render an applicant ineligible to take the ARRT certification exam. While conviction of a crime or academic sanction is not an absolute ban to school admission, admission would be dependent on the ARRT decision of eligibility. The ARRT allows preapplications to determine eligibility for certification when ethics and honor are an issue. More information can be requested by writing the ARRT, 1255 Northland Drive, St. Paul, MN 55120 or by accessing their website at www.arrt.org.

ADVISORY COMMITTEE
The Trinity Hospital School of Radiologic Technology has an established Advisory Committee for the purpose of oversight and guidance in maintaining program quality and continued program improvement. The committee is chaired by the program director. Other member representatives include Clinical Instructor(s), Radiology Department Administrator, Program Medical Director, Lead Radiologic Technologist, Radiology Coordinator, Student Representative and a public member. The Advisory Committee will meet at least annually to review and make recommendations for
changes to program mission, vision, policies, didactic curriculum and clinical education plan. The Advisory Committee will also meet at least biannually to review and revise the overall Assessment Plan of the program and ensure and support compliance with JRCERT Standards for accreditation. The Advisory Committee may also be called upon in situations of student grievances and/or student disciplinary action.

APPLICATIONS PROCESS

Application deadline is January 1st, for the subsequent class to begin in July. Application documents are available online at website or by contacting the School by mail, phone or email.

Trinity Hospital School of Radiologic Technology
P.O. Box 5020
Minot, ND 58702-5020 Phone: 701-857-5620
e-Mail: amy.hofmann@trinityhealth.org

The application procedure requires completion and submission of the following:
- Application Form
- High School Transcripts
- College Transcripts (current to fall term)
- Contact information for three personal references on reference forms
- $25 non-refundable application fee

All applications are reviewed and scored on the basis of transcripts and references received. All applicants will be contacted but only those meeting the minimum acceptance criteria will be contacted for a scheduled personal interview. Interviews are held in late January and/or early February.

Final acceptance decisions are made within one week following completion of interviews. Each applicant interviewed will be contacted.

Applicants notified of acceptance will have one week to send a written notice of acceptance and a non-refundable deposit of $300.00 which will be applied to the student’s book costs.

The final stage of acceptance occurs when the accepted applicant successfully completes the required medical physical.
STUDENT EXPENSES

TUITION
Trinity has established tuition affiliation agreements with Minot State University, University of Mary, and University of Jamestown. The student pays tuition directly to the university, according to university policy and registration schedule, the university then reimburses Trinity Health. It is up to the student to register with the university and communicate with assigned advisor.

Annual tuition for students not enrolled in an affiliated university or not receiving financial aid is $3,500. Tuition is due the first week of class and the second year tuition is due July 15th of fourth semester.

TUITION REFUND
If the student withdraws during the first semester which is a three month probationary period, 50% of tuition received will be refunded. No refund is given if student withdraws after first semester.

BOOKS
Students are responsible for the cost of the textbooks required by the program. The cost of text books for the full two years averages $750. The $300.00 tuition deposit will be credited toward the total cost of books. The remaining balance must be paid July 31st.

UNIFORMS / DRESS CODE
Students are to wear appropriate uniforms while in the clinical environment and are responsible for providing their own.

Surgical attire, when required for a clinical rotation area, will be provided by the hospital.

PROFESSIONAL ORGANIZATIONS
Students are responsible for paying annual dues to a national professional organizations, the American Society of Radiologic Technologists (ASRT) www.asrt.org. Senior students are also required to join our state professional society, North Dakota Society of Radiologic Technologists (NDSRT). Total dues are approximately $50.00 per year.
PRE-ENTRANCE PHYSICAL
All students ACCEPTED into the program must have a physical exam, including Mantoux testing and vaccination updates. This expense is incurred by the student. Evidence of good health and ability to meet the physical demands of the program is the final requirement for acceptance into this program.

HEALTH INSURANCE
All students are required to carry personal health insurance. The student will be enrolled for state Workforce Safety Insurance, the cost of which shall be paid by the program.

TRANSFER CREDIT
The program does not accept transfer credit from other radiologic technology programs.

STUDENT SERVICES
The following is a listing of student services provided by School of Radiologic Technology in conjunction with Trinity Health.
• Free parking (in designated areas)
• Free shuttle service (between clinical areas)
• Discounted meals (both hospital cafeterias)
• Free CPR (provided upon enrollment and recertification just prior to graduation)
• Free Hepatitis B vaccine series
• Free Mantoux testing (provided upon enrollment and annually)
• Free radiation monitoring service (replacement charges may apply)
• Free OSHA in-service training
• Free mandatory hospital in-service training
• Discounted text books
• Free limited Worker’s Compensation coverage
• Free counseling services (provided by instructors and pastoral care staff)
• Free lockers/storage for personal belongings
• Free identification badges (replacement charges may apply)
• Free medical library access
• Free flu shots
• Free internet access for school related purposes (in classroom and at various hospital locations)
• Free lead markers (replacement charges may apply)
• Surgical scrubs provided when on surgical rotations

GRADUATION

The structure of the curriculum is based on two years of full time study. The student must successfully complete all academic and clinical requirements of the Trinity Hospital School of Radiologic Technology in order to graduate.

GRADUATION REQUIREMENTS

To graduate from the Trinity Hospital School of Radiologic Technology, the student must fulfill all the following requirements:

1. Complete all didactic courses with a cumulative grade of no less than 80%.
2. Complete all clinical testing with a cumulative grade of no less than 90%.
3. Complete all competencies and proficiencies with a cumulative grade of no less than 80%.
4. Complete all clinical checkoffs, room objectives and special rotation objectives and assignments.
5. Complete all ARRT clinical and didactic requirements.
7. Return all tests and quizzes.
8. Return all hospital and school property.
9. Complete an exit interview with the Program Director.
10. Complete an application to ARRT for the registry exam and receive notification of scheduled exam date.

If the above requirements have been met, the student is then awarded a certificate from the school. Graduation is held late May or June, depending on class start date.

All students successfully completing the program are then eligible to write the American Registry of Radiologic Technologists (ARRT)
national certification examination. Upon successful completion of this exam, students receive the right to use the term Registered Technologist (Radiographer) — R.T.(R) (ARRT) after their name.

UNIVERSITY CREDIT
Students enrolled in a university degree program in radiologic technology will have a statement of completion forwarded to their university, upon completion of the school of radiology requirements and graduation from the program. Credit hours awarded are at the discretion of the individual university.

FAIR PRACTICES IN EDUCATION

NON-DISCRIMINATION
Student and faculty recruitment and student matriculation practices shall be non-discriminatory with respect to race, religion, color, gender, age, national origin, handicap, veteran status, marital status, or any other status or condition protected by applicable state or federal law.

SAFETY
The health and safety of students, faculty, and patients associated with student educational activities will be adequately safeguarded.

FINANCIAL
The school does not offer financial aid. The school of radiology is recognized by the United States Department of Education through the JRCERT accreditation mechanism.

Costs to students are determined to be reasonable and will be accurately stated and published.

Policies and processes for student withdrawal and tuition refund will be fair, published, and made known to all applicants.
**CLINICAL AND DIDACTIC COURSES — FIRST YEAR**

* Indicates the didactic course correlates with a clinical course of the same number.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Clock Hours (Didactic)</th>
</tr>
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<tbody>
<tr>
<td>*300</td>
<td>Introduction to Radiology/Orientation</td>
<td>45</td>
</tr>
<tr>
<td>302</td>
<td>Introduction to Anatomy and Positioning</td>
<td>18</td>
</tr>
<tr>
<td>*303</td>
<td>Radiation Protection I</td>
<td>10</td>
</tr>
<tr>
<td>304</td>
<td>Medical Terminology</td>
<td>9</td>
</tr>
<tr>
<td>305</td>
<td>Professional and Medical Ethics</td>
<td>12</td>
</tr>
<tr>
<td>306</td>
<td>Fundamental Concepts of Radiation Physics</td>
<td>6</td>
</tr>
<tr>
<td>307</td>
<td>Atom Structure of Matter</td>
<td>11</td>
</tr>
<tr>
<td>308</td>
<td>Electromagnetic Radiation</td>
<td>11</td>
</tr>
<tr>
<td>309</td>
<td>X-ray Production</td>
<td>8</td>
</tr>
<tr>
<td>310</td>
<td>X-ray Interaction with Matter</td>
<td>9</td>
</tr>
<tr>
<td>311</td>
<td>X-ray Emission and Exposure</td>
<td>14</td>
</tr>
<tr>
<td>313</td>
<td>Beam Restricting Devices and Grids</td>
<td>14</td>
</tr>
<tr>
<td>314</td>
<td>Intensifying Screens</td>
<td>10</td>
</tr>
<tr>
<td>*315</td>
<td>Respiratory System</td>
<td>18</td>
</tr>
<tr>
<td>*316</td>
<td>Upper Extremity</td>
<td>20</td>
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<tr>
<td>*317</td>
<td>Lower Extremity</td>
<td>18</td>
</tr>
<tr>
<td>*318</td>
<td>Spine</td>
<td>18</td>
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<tr>
<td>*319</td>
<td>Gastrointestinal System</td>
<td>26</td>
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<td>*320</td>
<td>Bony Thorax</td>
<td>8</td>
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<tr>
<td>*321</td>
<td>Cranium and Facial Bones</td>
<td>30</td>
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<tr>
<td>329</td>
<td>Patient Care</td>
<td>30</td>
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</tbody>
</table>
CLINICAL AND DIDACTIC COURSES — SECOND YEAR

* Indicates the didactic course correlates with the clinical course of the same number.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Clock Hours (Didactic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>301</td>
<td>Computer Science and Digital Imaging</td>
<td>8</td>
</tr>
<tr>
<td>401</td>
<td>Circulatory System</td>
<td>16</td>
</tr>
<tr>
<td>402</td>
<td>Nervous System</td>
<td>8</td>
</tr>
<tr>
<td>403</td>
<td>Digital Imaging Equipment</td>
<td>30</td>
</tr>
<tr>
<td>*404</td>
<td>Mammography</td>
<td>12</td>
</tr>
<tr>
<td>405</td>
<td>Sectional Anatomy</td>
<td>10</td>
</tr>
<tr>
<td>406</td>
<td>CT and MRI</td>
<td>16</td>
</tr>
<tr>
<td>407</td>
<td>Radiographic Quality</td>
<td>30</td>
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<td>408</td>
<td>Electronics</td>
<td>50</td>
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<td>409</td>
<td>Radiobiology</td>
<td>32</td>
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<tr>
<td>410</td>
<td>Radiation Protection II</td>
<td>14</td>
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<td>411</td>
<td>Diagnostic Ultrasound</td>
<td>8</td>
</tr>
<tr>
<td>412</td>
<td>Quality Assurance and Control</td>
<td>4</td>
</tr>
<tr>
<td>413</td>
<td>Endocrine System</td>
<td>4</td>
</tr>
<tr>
<td>414</td>
<td>Filming Principles</td>
<td>6</td>
</tr>
<tr>
<td>415</td>
<td>Processing Radiographic Images</td>
<td>10</td>
</tr>
<tr>
<td>*416</td>
<td>Urinary System &amp; Pharmacology</td>
<td>12</td>
</tr>
<tr>
<td>417</td>
<td>Reproductive System</td>
<td>4</td>
</tr>
<tr>
<td>418</td>
<td>Review for Certification Exam</td>
<td>110</td>
</tr>
<tr>
<td>429</td>
<td>Patient Care</td>
<td>30</td>
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COURSE DESCRIPTIONS
— FIRST YEAR

The following is an abbreviated description of each course. A more complete description is given in the student’s individual course syllabi available upon request.

300  RADIOTHERAPY ORIENTATION
The purpose of this course is to orientate the new students to the school, the radiology department and to review the policies and procedures of the school, department and hospital.

302  INTRODUCTION TO ANATOMY AND POSITIONING
This course is designed as a core curriculum of skeletal anatomy and an introduction to radiographic positioning in relation to the x-ray beam.

303  RADIATION PROTECTION I
This introductory course must be completed before the student begins their clinical rotation. It provides the student an understanding of the basic principles of radiation protection and how to implement them in clinical environments.

304  MEDICAL TERMINOLOGY
This course is designed to teach the meaning of word parts and how to combine them enabling the student to communicate in the medical world.

305  PROFESSIONAL AND MEDICAL ETHICS
This course provides an understanding of professional conduct, medicolegal issues and patient rights.

306  FUNDAMENTAL CONCEPTS OF RADIATION PHYSICS
This course is an introduction to sources of radiation and the appropriate units of measure.

307  THE ATOMIC STRUCTURE OF MATTER
A fundamental review of atomic structure with the introduction of radioactivity and particulate radiation.
ELECTROMAGNETIC RADIATION
A discussion of EMR, wave particle duality and energy-mass equivalence. An in-depth presentation of concepts and formulas relating to radiation intensity and exposure.

X-RAY PRODUCTION
How x-rays are produced and their affect on the emission spectrum is explored.

X-RAY INTERACTION WITH MATTER
The five basic x-ray interactions with matter are discussed.

X-RAY EMISSION AND EXPOSURE
This course is an in-depth discussion of x-ray quantity and quality.

BEAM RESTRICTION AND GRIDS
This course explores the role that beam restricting devices and grids play in the control of scatter reaching the imaging receptor.

INTENSIFYING SCREENS
Screen construction and characteristics are explored with an emphasis on patient safety and exposure technique considerations.

The following courses encompass radiography of the human body and related systems. Each course includes an anatomy review, positioning, radiographically significant physiology and pathology, trauma modifications, exposure technique consideration, image critique and radiation protection.

RESPIRATORY SYSTEM
UPPER EXTREMITY
LOWER EXTREMITY
SPINE
GASTROINTESTINAL DIGESTIVE SYSTEM
This course begins early in the student’s first year and continues until graduation. It develops competencies in patient care as related to the radiography department, emergency situations and the surgical suite.

**COURSE DESCRIPTIONS — SECOND YEAR**

**301 INTRODUCTION TO COMPUTER SCIENCE & DIGITAL IMAGING**
The fundamental principles of computer operation are discussed. Computer and digital applications in the radiology department are identified.

**401 CIRCULATORY SYSTEM**
This course presents the anatomy, physiology, pathology and imaging procedures relating to the cardiovascular and lymphatic systems.

**402 NERVOUS SYSTEM**
Anatomy, physiology and pathology of the nervous system is presented.

**403 SPECIAL EQUIPMENT AND DIGITAL IMAGING**
Included in this course is discussion of image intensified fluoroscopy, digital fluoroscopy, digital radiography, computed radiography and tomography.

**404 MAMMOGRAPHY**
This course presents breast anatomy and pathology with an emphasis on routine positioning skills.

**405 SECTIONAL ANATOMY**
The student learns to identify human anatomy in axial section, sagittal and coronal image orientation.
MAGNETIC RESONANCE IMAGING
406 COMPUTED TOMOGRAPHY
The basic principles of equipment operation and image production of the CT and MRI imaging systems are explored.

407 RADIOGRAPHIC QUALITY
A complete discussion of the factors affecting the quality of the radiographic image are explored.

408 ELECTRONICS
This course encompasses the principles of electrostatics, electrodynamics and electromagnetism with the major emphasis on understanding the components and circuitry of the x-ray machine.

409 RADIATION BIOLOGY
This course explores radiation effects on humans from the DNA level through total body response.

410 RADIATION PROTECTION II
An in-depth discussion of radiation protection including room design, NCRP regulations and CFR-Title 21 requirements.

411 DIAGNOSTIC ULTRASOUND
This course is designed to provide the student with basic introductory knowledge of ultrasound physics principles. Instrumentation and operation of diagnostic medical sonography equipment is presented. The course also includes a clinical rotation.

412 QUALITY ASSURANCE AND CONTROL
This course explores QA/QC testing methods and tools that are needed to assure proper radiographic equipment functioning.

413 ENDOCRINE SYSTEM
Hormone secretion and function are reviewed.

414 & 415 FILM PROCESSING
This course traces film from construction to the final product
of the manifest image. Quality control, quality assurance, and artifacts are included.

416 URINARY SYSTEM AND PHARMACOLOGY
The urinary system as it relates to radiography is presented. Venipuncture is learned, contrast media selection and reactions are explored along with emergency drug administration.

417 REPRODUCTIVE SYSTEM
The male and female reproductive systems are reviewed and current imaging modalities are discussed.

418 Review, in preparation for ARRT exam.

CLINICAL EDUCATION PLAN
The clinical and didactic aspect of the student’s education is closely monitored by the program director and the clinical instructor and supervised by registered technologists. The student will spend much of their day in the radiology department involved in “hands on” learning. Students spend an average of 10 hours per week in the classroom and 30 hours in clinical education. All clinical assignments are within the Trinity Health Campus. Our goal, and primary student learning outcome, is for the student to successfully complete the program, at or beyond the career entry level for a radiologic technologist. Clinical education is closely correlated with the didactic curriculum and the student is required to attend didactic class prior to the clinical lab class. The following performance indicators are used to assess the student’s clinical learning outcome.

Performance Indicator:
- Observe, assist, and perform radiographic examinations in the assigned clinical area in accordance with level of competency achieved.
- Become a professional as demonstrated through appearance, conduct and knowledge.
- Demonstrate the ability to work and communicate effectively with fellow students, technologists and others in the clinical situation.
• Adhere to policies and rules.
• Demonstrate punctuality and efficiency in assignments.
• Utilize radiation protection procedures.
• Provide for the physical and psychological needs of the patient.
• Demonstrate initiative, intellectual curiosity and adaptability in the mastery of skills and in the performance of procedures.
• Recognize limitations in knowledge and seek assistance as required and in adherence with the Supervision Policy.

The student learning outcome is assessed through a process of clinical testing, performance evaluations, professional development assessments and final mastery testing. Failure of the student to complete all clinical competencies, performance indicators and final testing would result in delayed graduation.

Students receive a comprehensive Clinical Plan which contains all clinical syllabi, requirements, competencies, assignments and measurable performance indicators needed to successfully complete the two year program.

ACADEMIC CALENDAR

The School of Radiologic Technology operates on a schedule of three sixteen week semesters per year. The school week runs from Sunday through Saturday. The student will complete six consecutive semesters during their internship including a limited number of weekend and evening clinical rotations. Time spent in weekend and evening assignment rotations will not exceed 25% of the students total clinical clock hours.

Master schedules are provided for the students approximately six months in advance. Schedules are assigned to provide equitable rotations with adequate time allowed to achieve completion of all required competencies. All students rotate through the Trinity Radiology Department and several of the clinics. Regularly scheduled hours vary according to student assignment but are mainly from 8:00 a.m. to 4:00 p.m. and 10 a.m. to 6 p.m., Monday through Friday. Each student is also assigned 1–2 weeks of clinical evenings per semester from 1:00 p.m. to 9:00 p.m. With the exception of the first semester,
each student is assigned 1–2 clinical weekends per semester, from 9:00 a.m. to 5:00 p.m. These clinical rotations are scheduled in order to enhance the student’s clinical experience by providing an opportunity for increased exposure to trauma patient care and practice of critical thinking skills and independent judgment.

It should be noted that the student schedule is designed to never exceed 40 hours per week (Sunday – Saturday) of combined clinical and didactic class time and that clinical assignments do not conflict with regularly scheduled didactic or clinical classes. Didactic classes are scheduled Monday through Thursday. Class is occasionally scheduled on Friday.

**STUDENT PROFESSIONALISM POLICY**

The Student Professionalism Policy is contained in the Programs Policy Manual and is available upon request. This policy provides guidelines to the student concerning professional conduct and appearance. Students not in compliance with the provisions of this policy are subject to disciplinary procedures.

**ACADEMIC STANDARDS and GRADING SYSTEM**

To promote higher standards of professional achievement in the field of radiologic technology, students will be required to maintain academic excellence.

Students of the School of Radiologic Technology are required to maintain at least an 80% average in didactic assignments and testing, a 90% average in clinical testing and an 80% average in clinical performance evaluations.

Students not meeting the academic standards will be subject to disciplinary action, including dismissal and may not be allowed to graduate unless academic standards are met.

**PROBATION, STUDENT CONDUCT**

Students enrolled in their first three months of education in the
program are considered to be probationary students. This probationary period is two-fold. It is provided for the school to determine whether or not the student is performing satisfactorily as a student technologist. Also, this period provides the student the opportunity to decide whether or not he/she is satisfied with the school and their career choice. The student may be eligible for a refund if they choose to drop out of the program at this time. (refer to TUITION in the STUDENT EXPENSES section)

It should be noted that the student can again be placed on probation, following the initial probationary period, however, no refund would be issued. Students may be placed on probation for substandard behavior or inappropriate conduct and academic failure. Probation is initiated at the discretion of the Program Director, in compliance with the school’s DISCIPLINE AND DISMISSAL POLICY which is published in the policy manual (available upon request and also at personal interview).

VACATIONS, HOLIDAYS AND TIME OFF
Students will be granted the following vacation/holiday days:

- Labor Day
- Thanksgiving Break — Thursday and Friday
- Christmas/New Year — approximately two weeks
- Easter — Good Friday through Easter Sunday
- Memorial Day
- Spring Break – length and dates vary
- Vacation — one week in June (following graduation)
- July 4
- Two Personal Leave Days as Juniors
- Three Personal Leave Days as Seniors

ABSENTEEISM AND SICK LEAVE
Students are allowed five sick days per year. If a student exceeds this yearly limit, they may be required to makeup lost time.
STUDENT EMPLOYMENT POLICY

Students who seek outside employment or who are employed by Trinity Health during their enrollment in the program are cautioned to avoid excessive work schedules that may interfere with their academic and clinical performance. Adjustments to the student schedule to accommodate outside employment will not be made.

TRANSPORTATION AND PARKING

Students are responsible for transportation to and from clinical assignments. Parking is free but regulations of Trinity Health clinics and hospital campuses must be followed. Trinity Health also offers a free on campus shuttle service, that students are encouraged to utilize.
PROGRAM OFFICIALS & FACULTY

Jim Coffin, RT(R)
RADIOLOGY DEPARTMENT ADMINISTRATOR

Amy Hofmann, MBA, RT(R)(CT), RDMS
PROGRAM DIRECTOR
Diploma — St. Alexius School of Radiologic Technology
BS — Minot State University
MBA — University of Mary

Kenneth Keller, MD
MEDICAL DIRECTOR
MD — University of North Dakota, Board Certified Radiologist

Cindy Milkey, BS, RT(R)(CV)
CLINICAL INSTRUCTOR
Diploma — Trinity School of Radiologic Technology
BS — Minot State University

Students

ADJUNCT INSTRUCTORS
Amanda Olson, AS, RDMS
Diploma — Argosy University, Diagnostic Medical Sonography Program
AS — Bismarck State College

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Diploma — Trinity School of Radiologic Technology
BS — Minot State University

Tina Rodgers, BS, RT(R)(CT)(MR)
Diploma — Trinity School of Radiologic Technology
BS — University of Mary

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