

# SANFORD MEDICAL CENTER FARGO

School of Radiography

Student Handbook  
2022 -2023

## TABLE OF CONTENTS

|   |    |
|---|----|
| Policy and Procedure Statement .....                        | 5  |
| Sponsoring Organization History .....                       | 5  |
| Sanford Health Mission Statement .....                      | 5  |
| History of the Program .....                                | 6  |
| Accreditation .....   | 6  |
| Philosophy .....  | 6  |
| School of Radiography Mission Statement .....               | 6  |
| Program Goals .....   | 7  |
| Outcomes .....  | 7  |
| Academic Year .....   | 9  |
| Two Year Calendar.....                                      | 10 |
| <b>Student Policies – Academic</b>                          |    |
| Credit .....  | 10 |
| Academic Assessment .....                                   | 10 |
| Developmental Advisement .....                              | 11 |
| Examinations .....  | 11 |
| Grading System.....   | 11 |
| Grade Point Average (GPA) .....                             | 11 |
| Grade Report .....  | 12 |
| Incomplete Grades .....                                     | 12 |
| Satisfactory Progress .....                                 | 12 |
| Academic Warning .....                                      | 12 |
| Graduation Requirements.....                                | 12 |
| Transcripts .....   | 12 |
| Early Release Policy .....                                  | 12 |
| Transfer of Credit Policy .....                             | 12 |
| <b>Student Policies – Clinical</b>                          |    |
| Progression Policy.....                                     | 13 |
| Clinical Competency-Based Objectives and Evaluations .....  | 13 |
| Clinical Education Flow Chart .....                         | 14 |
| Student Supervision.....                                    | 16 |
| Rotational Schedules .....                                  | 16 |
| <b>Student Policies - Admission Information/Orientation</b> |    |
| Criminal Background Checks .....                            | 17 |
| Orientation .....   | 18 |
| Full Time Student Status.....                               | 18 |
| Withdrawal from the Program .....                           | 18 |
| Readmission .....   | 18 |
| Program Assessment .....                                    | 18 |
| <b>Student Policies - Discipline</b>                        |    |
| Code of Ethics .....  | 19 |
| Scholastic Honesty.....                                     | 20 |
| Suspension .....  | 21 |
| Probation/Dismissal .....                                   | 21 |
| Conduct Subject to Program Discipline.....                  | 21 |
| Disciplinary Action .....                                   | 22 |

|   |    |
|---|----|
| Grievance Policy/Due Process .....                          | 22 |
| Grievance Procedure .....                                   | 22 |
| <b>Student Policies – Attendance</b>                        |    |
| Personal Time .....   | 23 |
| Extended Sick Leave .....                                   | 24 |
| Major/Catastrophic Leave .....                              | 24 |
| Compassionate Leave .....                                   | 24 |
| Make-up Time .....  | 24 |
| Compensatory Time .....                                     | 25 |
| Improper Use of Personal Time .....                         | 25 |
| Tardiness Policy .....                                      | 25 |
| Program Attendance Record .....                             | 26 |
| Military Leave/Jury Duty .....                              | 26 |
| <b>Student Policies – Safety, Security and Student Life</b> |    |
| Student Behavior Code.....                                  | 27 |
| Sexual Harassment/Offensive Conduct .....                   | 27 |
| Confidentiality .....                                       | 27 |
| Dress code .....  | 28 |
| Student Health .....  | 28 |
| MRI Safety .....  | 29 |
| Drug/Alcohol Policy .....                                   | 29 |
| Grounds For Testing .....                                   | 29 |
| Injury/Illness, Occupational Exposure Reporting .....       | 30 |
| BLS Certification .....                                     | 30 |
| Student Rights and Responsibilities .....                   | 30 |
| Participation in Outcome Assessment Committee .....         | 31 |
| Student Records .....                                       | 31 |
| Family Educational Rights and Privacy Act of 1974 .....     | 31 |
| Activities and Organizations .....                          | 32 |
| Secondary Employment .....                                  | 32 |
| Pregnancy Policy .....                                      | 32 |
| Fire Safety .....   | 32 |
| Hazardous Materials and Waste .....                         | 33 |
| Severe Weather .....  | 33 |
| Security .....  | 33 |
| Computer and Software Policy .....                          | 34 |
| Social Networking Policy .....                              | 34 |
| Tablet Use Policy .....                                     | 34 |
| Radiation Protection Policy .....                           | 35 |
| <b>Facilitates and General Policies</b>                     |    |
| Off- Campus Living .....                                    | 36 |
| Lounge and Locker Area .....                                | 36 |
| Sanford Medical Center Food Services .....                  | 36 |
| Alcoholic Beverages.....                                    | 36 |
| Smoke Free Environment .....                                | 36 |
| Radiation Dosimetry for Personnel Monitoring .....          | 36 |
| Telephone/Personal Cell Phone Policy .....                  | 37 |
| Emergency Calls .....                                       | 37 |

|                                       |    |
|---------------------------------------|----|
| Acceptance of Gifts/Gratuities .....  | 37 |
| Parking and ID Badges .....           | 37 |
| <b>Financial Information</b>          |    |
| Tuition .....                         | 38 |
| Financial Aide .....                  | 38 |
| Refunds .....                         | 38 |
| Malpractice Liability Insurance ..... | 38 |
| <b>Student Services</b>               |    |
| Placement Services .....              | 38 |
| Occupational Health Services .....    | 38 |
| <b>Curriculum</b>                     |    |
| Curriculum Outline .....              | 39 |
| General Education Prerequisites ..... | 41 |
| Course Descriptions .....             | 41 |
| JRCERT Standards .....                | 45 |

The staff of the Sanford Medical Center Fargo School of Radiography prepared this handbook. The program's Outcomes Committee endorsed the contents for the use of prospective and enrolled students and campus advisors, providing accurate information about program policies. It serves to guide the students and faculty in academic issues.

This handbook is intended to be a description of the policies, academic programs, degree requirements, and course offering in effect for the 2021-2022 academic year. It should not be construed as a contract between the student and program. The Sanford Medical Center Fargo School of Radiography reserves the right to change any of the policies and procedures described in this handbook and to apply these changes to any or all of its students as it sees fit. The school staff may also choose to add or delete course offerings or degree programs at any time.

## **POLICY AND PROCEDURE AGREEMENT**

Students shall read the Sanford Medical Center Fargo School of Radiography Student Handbook and shall have the opportunities to ask questions. Students are required to comply with all of the policies, rules and regulations of the Sanford Medical Center Fargo School of Radiography and Sanford Medical Center Fargo.

*Upon completion of the Student Handbook review, the student will read and sign the "Student Handbook Acknowledgment" form. This form will become a part of the students file.*

## **SPONSORING ORGANIZATION HISTORY**

The School of Radiography is sponsored by Sanford Medical Center Fargo located in Fargo, North Dakota. Sanford Health is a not-for profit organization whose history dates back to the early 1900s. In 1905, two Fargo physicians, Dr. Olaf Sand and Dr. Nils Tronnes, met with civic leaders above Lars Christianson's drug store at 10 Broadway to discuss the need for a new hospital. Un-cleared land at Fargo's northern edge emerged as the ideal location. In February 1908, St. Luke's Hospital opened its doors. Within three days the 35-bed hospital was filled to capacity. With inspiration and foresight, Drs. Sand and Tronnes continued to forge new ground. They invited area physicians to join them in medical practice, encouraging the advancement of specialists to better meet complex needs. In 1919 they officially formed Fargo Clinic. Located next to St. Luke's Hospital, the Fargo Clinic building opened in 1921. The innovation and leadership of these pioneering physicians set the stage for many milestones over the past hundred years. Their legacy, MeritCare Health System, became one of the nation's first integrated health systems. In 2009, MeritCare merged with Sanford Health in Sioux Falls, South Dakota and today is an integrated health system headquartered in the Dakotas. Sanford Health became the largest employer in the Dakotas and merged with the Evangelical Lutheran Good Samaritan Society in 2018. It is a major health system that continues to grow with over 48,000 employees, 480 clinics, 44 medical centers, and 1,400 physicians in 26 states and nine countries.

### **Sanford Health Mission and Vision**

Dedicated to sharing God's love through the work of health, healing, and comfort.

Improving the human condition at every stage of life through exceptional care, spiritual enrichment, innovation, and discovery.

## **HISTORY OF THE PROGRAM**

The first students to graduate from the School of Radiography date back to 1967. Since that time, more than 300 students have graduated from the two-year program, allowing them to take the national registry exam and become registered radiographers. In 1996 IBC became the didactic center for the program with MeritCare providing the clinical experience. The last class to graduate under these conditions was in July 1998. The program went on an inactive status at that time. MeritCare Health System reactivated the program January 1999. Presently the program affiliates with degree offering universities allowing students to complete the Bachelor of Science degree in Radiologic Science upon successful completion of the 21-month radiography internship. The Sanford Medical Center Fargo School of Radiography is a hospital based program, issuing a certificate after successful completion of the 21-month Program. The University of Enrollment issues the Bachelor's degree.

## **ACCREDITATION**

The School of Radiography is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), the only organization recognized by the U.S. Department of Education to evaluate and accredit educational programs in radiography.

Sanford Medical Center Fargo is accredited by the Joint Commission and is a Diagnostic Imaging Center of Excellence through the American College of Radiology (ACR).

All affiliating universities must be accredited through the Higher Learning Commission.

## **PHILOSOPHY**

The School of Radiography serves as an upper-division program focusing on teaching qualified students to become professional radiographers. The faculty of the School of Radiography offers to qualified students, a collegiate level program of radiography education that prepares graduate radiographers for beginning multi-level professional practice and for leadership in one or more modalities of care. The program implements its mission through a clearly defined set of objectives and outcomes that meet and exceed the "STANDARDS" for an accredited program through the Joint Review Committee on Education in Radiologic Technology (JRCERT).

The philosophy of the Program faculty is congruent with the Sanford Medical Center Fargo School of Radiography mission. The faculty is committed to providing a quality radiography program, which prepares the graduate to function as an entry level radiographer in a variety of healthcare settings. The staff exemplifies the mission of Sanford Medical Center Fargo – *Dedicated to sharing God's love through the work of health, healing and comfort.*

## **MISSION STATEMENT**

It is the mission of Sanford Medical Center Fargo School of Radiography to provide a quality education designed to prepare a knowledgeable and caring professional radiographer who is cognizant of and sensitive to the health needs of individuals and communities in a variety of health care delivery modalities.

To fulfill this mission, the program strives to prepare self-assured and service-oriented health care providers who, by virtue of critical thinking, life-long learning and ethical values, will promote safe quality patient care. The mission of Sanford Medical Center Fargo School of Radiography is to provide students with a broad base of knowledge plus specialized courses necessary for their careers in health care organizations.

## PROGRAM GOALS

Program goals reflect the operation of the mission of the program, the philosophy of the faculty, and the student outcomes of the curriculum.

The student will:

1. Demonstrate the knowledge necessary for a clinically competent, safe entry-level radiographer.
2. Model effective, interactive communication.
3. Employ critical thinking and problem solving for decision-making in radiology practice.
4. Accept responsibility for ongoing professional growth and continued learning.

## OUTCOMES

To uphold our mission, the School of Radiography engages in the following outcomes:

- The student will demonstrate optimal positioning skills
- The student will select the correct exposure techniques
- The student will be able to produce radiographic images of diagnostic quality
- Students will apply ALARA principles to ensure radiation protection for all concerned
- Students will have the ability to communicate, interact and deal effectively with supervisors, peers, patients and other employees
- The student will interact with patients appropriately
- The student will perform non-routine exams on trauma patients by adaptation
- The student has the ability to problem solve and use critical thinking skills
- Students will provide safe, optimal care for pediatric patients
- Students will provide safe, optimal care for geriatric patients
- The student demonstrates, identifies and analyzes current literature in radiology
- Graduate students will participate in a professional association
- Graduate students will become multi-credentialed

Program effectiveness include:

- Employer satisfaction with graduates
- Graduate satisfaction and post one year graduate satisfaction with the program
- Completion of the program within the 21 months
- Employment within twelve months of graduating from the program
- Successful passing of the national board, the ARRT certification exam

The program goals/objectives represent criterion for the student outcomes identified as competencies that the graduate will possess at the completion of the radiography program. These are clinical competence, professional values, critical thinking, communication and leadership. Graduates are confident, life-long learners, prepared to meet the challenges of a dynamic, evolving profession within a healthcare delivery system, utilizing a scholarly approach to acquire new knowledge that will influence their radiology practice. In its entirety, the curriculum is logically sequenced, unified in concepts, and provides a firm foundation for the graduate. An annual program outcome assessment plan describes the program's measurements of achieving its mission and goals. The document is contained in the Master Plan located on the School of Radiography SharePoint drive. Assessment of the program is gathered throughout the year and analyzed for continuous improvement application.

## **CLINICAL COMPETENCY**

The graduate will be able to:

- Apply modern principles of radiation exposure, radiation physics, radiation protection and radiation biology to produce diagnostic images, utilizing state-of-the-art computerized and digital radiography and digital fluoroscopy.
- Demonstrate knowledge of medical terminology, pathology, cross-sectional anatomy, topographic anatomy, anatomy and physiology, positioning, procedures and radiographic processing to produce diagnostic images.
- Provide direct patient care, such as taking vital signs, venipuncture procedures, BLS, lifting/transferring patients, patient assessment; and assisting with administering contrast media and while applying Standard Precautions.
- Evaluate and report malfunction of equipment and accessories.
- Evaluate radiographs for diagnostic quality.
- Provide patient education and family education regarding preparation, expectations and post-procedural care, as well as other education related to the types of examinations performed on patients.
- Apply computer skills and have specific working knowledge of workplace applications and programs.
- Practice through strong ethical, legal and educational principles in such a way to benefit the patient, the radiographer, the facility and the profession.
- Critique radiographs for positioning, appropriate anatomy and overall image quality.
- Demonstrate advanced knowledge of radiographic procedures.
- Demonstrate knowledge of departmental policies and procedures to ensure regulatory and internal compliance; be capable of assessing equipment use and performance.
- Demonstrate application of CR, DR, and PACS.
- Identify and select established protocols for particular cases in the clinical setting.
- Identify and apply total quality management concepts in the imaging settings.
- Apply trauma radiography techniques and critique the results.
- Describe facility risk management and incident reporting and its impact on the radiology department's activities.
- Apply Basic Life Support and for working in trauma, cardiovascular interventional radiology, critical care and patient-focused care settings.
- Perform mobile and surgical radiography, utilizing mobile radiographic and C-arm equipment.
- Demonstrate competency in the following specialties: CT, MRI, and mammography (optional).

## **PROFESSIONAL VALUES**

- Apply education in the following areas: critical-thinking skills, liberal arts, basic sciences, communication skills, and computer science.
- Be prepared to take the national registry with ARRT to become a certified, registered technologist.
- Demonstrate responsibility and accountability for ongoing professional growth and learning.
- Participate in professional societies and community activities.
- Advocate for patient rights through incorporation of professional values and legal, ethical and moral aspects with respect for the autonomous nature of people including applying privacy and confidentiality regulations (HIPAA-Health Insurance Portability and Accountability Act).
- Describe the financial implications of health care delivery.



## **CRITICAL THINKING, COMMUNICATION AND LEADERSHIP**

- Possess problem solving, critical-thinking, decision-making and communication skills.
- Demonstrate professional leadership skills.
- Apply appropriate, empathetic human relation skills to work as part of the team.
- Demonstrate continuing compassion for patients and an ongoing commitment to high-quality patient care, cognizant of safety issues and graduating as a safe practitioner.
- Demonstrate appreciation for and respect of cultural diversity and age-specific considerations.
- Assure quality and appropriateness of radiology related medical records.
- Monitor industry publications and the general media for information related to radiology and health care in general.
- Describe departmental budgets and describe how they correlate with the budgets of other departments within the institution and with budgets of other radiology departments/operations in other settings.
- Describe basic marketing and public relations as they relate to radiology.
- Demonstrate involvement in the infrastructure of the health care delivery system, such as committees in the work setting and professional associations.
- Describe safety regulations as administered by OSHA, EPA, RSO, FDA CDC, etc.
- Demonstrate how to access medical information resources via computer networks and other systems.

## **ACADEMIC YEAR**

The academic year is divided into three terms: fall, spring and summer.

- Fall Term (17 weeks) 4th Monday in August-Christmas
- Spring Term (21 weeks) January-May
- Summer Term (9 weeks) June-August

\*Please note all holiday and academic breaks are listed on the academic calendar

## 2 Year Calendar 2022-2025

(Subject to Change)

| Fall Term (17 weeks)     | 2022                                  | 2023                                  | 2024                                  |
|--------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Classes Begin            | Monday, August 22                     | Monday, August 21                     | Monday, August 26                     |
| Labor Day Holiday        | Monday, September 5                   | Monday, September 4                   | Monday, September 2                   |
| Thanksgiving Holiday     | Thursday and Friday<br>November 24-25 | Thursday and Friday<br>November 23-24 | Thursday and Friday<br>November 28-29 |
| Term Ends/ Evaluation    | Friday, December 16                   | Friday, December 15                   | Friday, December 20                   |
| Christmas Break(2 weeks) | Dec 19 – Jan 2                        | Dec 18-Dec 29                         | Dec 23-Jan3                           |

| Spring Term (21 weeks) | 2023                | 2024               | 2025              |
|------------------------|---------------------|--------------------|-------------------|
| Classes Begin          | Tuesday , January 3 | Tuesday, January 2 | Monday, January 6 |
| Spring Break           | March 13-17         | March 11-15        | March 10-14       |
| End of Term            | Wednesday, May 24   | Wednesday, May 22  | Wednesday, May 21 |
| Graduation             | Friday, May 26      | Friday, May 24     | Friday, May 23    |

| Summer Term (10 weeks) | 2023             | 2024             | 2025             |
|------------------------|------------------|------------------|------------------|
| Memorial Day           | Monday, May 29   | Monday, May 27   | Monday, May 26   |
| Classes Begin          | Tuesday, May 30  | Tuesday, May 28  | Tuesday, May 27  |
| 4th of July Break      | July 3-July 7    | July 1-July 5    | June 30-July 4   |
| End of Term            | Friday, August 4 | Friday, August 9 | Friday, August 8 |

*Two week break before next term begins.*

### STUDENT POLICIES – ACADEMIC

#### Credit

All academic units are expressed in terms of term credit hours. A term credit hour represents a minimum of twenty (20) class hours of lecture or discussion. The class hour is fifty (50) minutes. Radiology clinical hours are assigned as follows: 0-440 hours = 2 credits, 441-500 hours = 3 credits, 501-540 hours = 4 credits, 541-600 hours = 5 credits

#### Academic Assessment

Academic assessment is an ongoing process with the Sanford Medical Center Fargo School of Radiography. Students are required to participate in all of the assessment activities throughout the curriculum. These include, but are not limited to, monthly developmental testing, radiography program self-reporting assessment and other surveys and tests that may be directed by the program.

### Developmental Advisement

The advisement program supports the personal and professional development of students. Orientation provides the student with information to adjust to the demands of the internship and allows interaction with classmates in a supportive environment. Mid-term and at completion of the term, the program staff meet with the student individually to evaluate the academic development and growth in interpersonal interactions, behavioral awareness, problem solving, decision making and evaluations. Grades will be reviewed at this time. The advising process is an opportunity for the student to identify and assess academic progress and personal growth.

### Examinations

Regular and final examinations are given to determine academic achievement and academic progress. Examinations are given at the discretion of the faculty. The faculty may use other forms of evaluating student academic achievement and progress. Regular examinations include tests administered by course faculty throughout the term. Some courses may include final examinations which take place at the end of the course.

### Grading System

Grades reflect achievement and competency. Achievement is based on the evidence of tests, class participation, research, proficiency in skills, and/or other means of measurements as defined by the instructor. The letter grade, grade points and numerical grades are assigned as follows:

|    |              |          |   |
|----|--------------|----------|---|
| A  | 4.0          | 97-100   |   |
| A- | 3.7          | 93-96    |   |
| B+ | 3.3          | 89-92    |   |
| B  | 3.0          | 85-88    |   |
| B- | 2.7          | 81-84    | Grade evaluation for the clinical experience is based upon: |
| C+ | 2.3          | 77-80    |   |
| C  | 2.0          | 73-76    |   |
| C- | 1.7          | 70-72    | Required competency evaluations = 60%                       |
| D+ | 1.3          | 66-69    | Professional development evaluations = 30%                  |
| D  | 1.0          | 62-65    | Rotation objectives evaluations = <u>10%</u>                |
| D- | 0.7          | 60-61    |   |
| F  | 0            | Below 60 | 100%  |
| F  | FAIL         |          |   |
| I  | INCOMPLETE   |          |   |
| S  | SATISFACTORY |          |   |

### GPA

The Sanford Medical Center Fargo School of Radiography grade point average (GPA) is used to determine academic standing of the students. Grade points are accumulated per credit hour at the rate indicated under GRADING SYSTEM. Grades of INCOMPLETE (I), and SATISFACTORY (S) will not be used to compute the GPA.

To determine the grade point average, divide the total grade points earned by the total number of the term credit hours attempted for which the student receives a letter grade. If a student repeats a course, both grades remain on the transcript but the last grade acquired will be used to compute the GPA.

At the close of each term, final grades are recorded on the students' permanent records and grade reports are issued to students. Instructors inform students of their mid-term grades as an indication of their progress. Mid-term grades are not recorded on the students' permanent transcripts.

### **Grade Report**

At the completion of each term, an evaluation session is scheduled with the program staff. At this time, grades are reviewed and clinical evaluations are reviewed. Updated transcripts will be sent to the University of Enrollment periodically throughout the 21 month program.

### **Incomplete Grades**

An incomplete (I) grade is given only at the end of a term at the discretion of the instructor. If an incomplete grade is not completed within the first four weeks of the next term, failing grades or zero points will be given for all uncompleted work.

### **Satisfactory Progress**

Academic progress is measured by grade-point average and objectives completed. Maintenance of a 3.0 GPA (grade point average) is necessary to remain in the program. Any course with a final 'D' grade will require remedial course work. A 'C' is required before the student is able to graduate.

### **Academic Warning**

A student with an average grade of "D" or "F" during the term for course work shall receive an academic warning, in writing from the course faculty. The student is required to meet with the course faculty who will advise on the areas of concern. The student will develop a written plan as to how to improve academic standing in that class. The student is then required to meet with the program director to review the proposed plan. Any student receiving less than a "B" grade in the clinical grade will require further evaluation for continuance in the program.

### **Graduation Requirements**

The School of Radiography grants a certificate to qualified graduating students. The University of Enrollment awards the radiologic science degree to students successfully completing the universities' requirements.

### **Transcripts**

Transcripts are certified copies of the student's permanent record and show his or her academic status at the time of issuance. Transcripts will be issued only if authorized in writing by the student. Either a completed transcript request or a letter bearing the student's signature is acceptable. By federal law, telephone requests cannot be honored, nor can requests by relatives or friends of the student. Each transcript includes the student's entire academic record to date. Partial transcripts are not issued. The program does not fax transcripts.

### **Early Release Policy**

Sanford Medical Center Fargo School of Radiography does not provide an early release option from the program.

### **Transfer of Credit Policy**

The program does not accept transfer students. If the student chooses to transfer to another clinical education site, an official letter of withdrawal must be provided to the program. The campus of enrollment must be notified of the transferring process also. The program will provide directly to the program, upon written request by that program, a transcript with completed coursework grades and the course syllabi and outline of courses

taken to date. Although the curriculum requirements are the same for most radiography programs, the sequencing of the academic courses as well as clinical education schedules varies among the programs.

## **STUDENT POLICIES – CLINICAL**

### **Progression Policy**

The student will be transferring knowledge of theory to application of skills in performing diagnostic examinations. As time progresses and experience is gained, so will the level of the student's competencies increase. The clinical competencies are designed to prepare the student for entry-level job competencies upon completion of clinical education. Clinical grades will be issued based on the performance and completion of competencies. Students must maintain a "B" grade in order to progress to the next term.

### **Clinical Competency-Based Objectives and Evaluations**

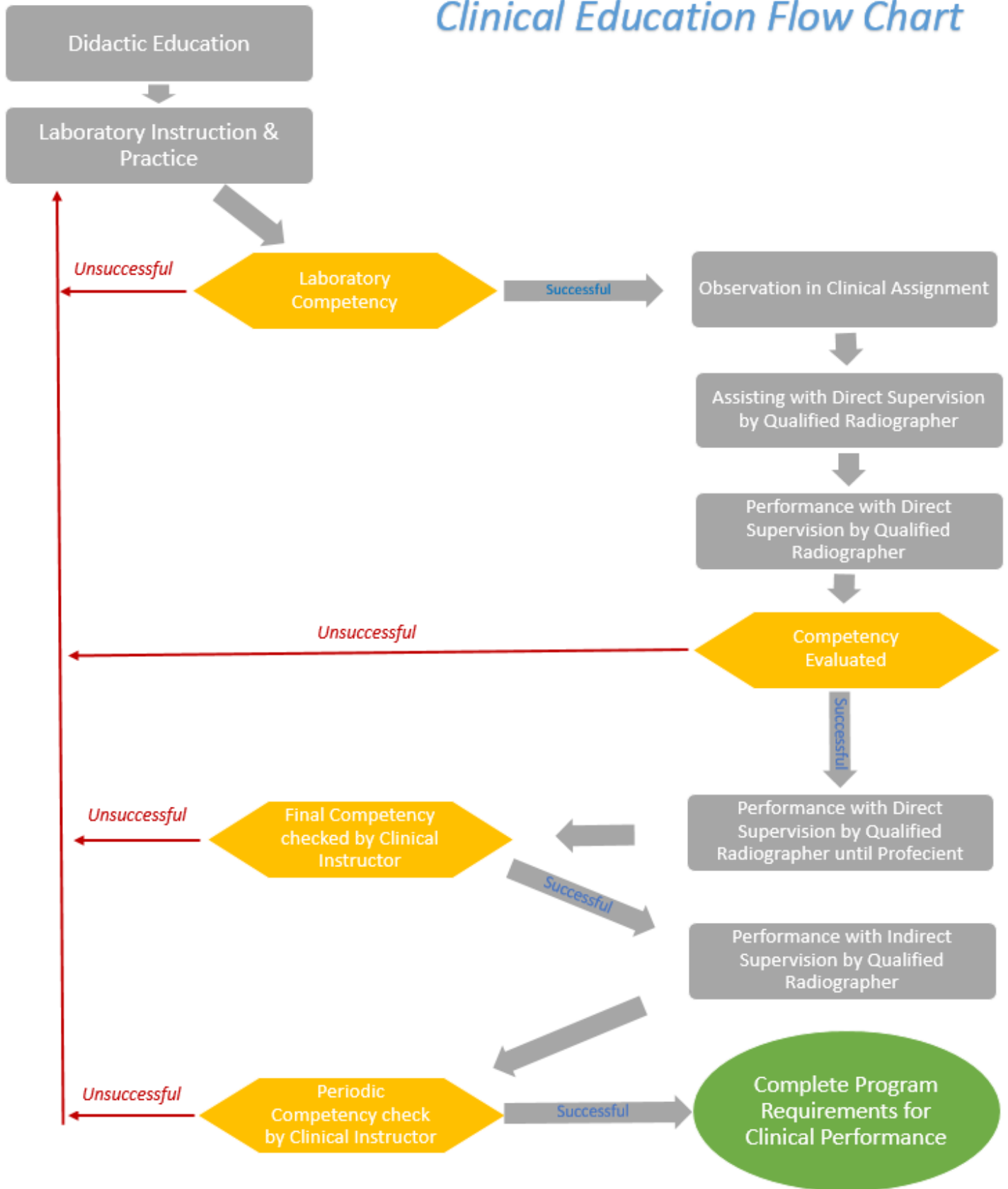
The clinical education phase of the program provides an environment for supervised, competency-based clinical education and experience and offers a sufficient, well-balanced variety of radiographic examinations and equipment. Clinical sites are Sanford Medical Center, Broadway, Sanford South University, Sanford Clinic South pointe and Sanford Orthopedic Clinic. Orientation to each site is included in the first term.

Clinical education is essential to the education of the student radiographer. It combines cognitive, psychomotor, and affective aspects of the profession. As with classroom education, clinical education requires planning, structure, supervision, and evaluation. Clinical faculty are responsible for assuring that students become competent in the procedures set forth by the program.

The cognitive (classroom or acquired knowledge) and psychomotor (clinical or motor skills) aspects of the curriculum are integrated throughout. The student should have mastered cognitive prerequisite competencies necessary for each phase of clinical education. The affective aspects of the curriculum focus on the student's emotions, values, and attitudes. Affective performance ranges from receiving an emotion to organizing a value system to build character. Teaching and evaluating the student's affective behavior in the clinical setting is key for this domain that builds positive value systems toward work and patient care.

As visualized on the flow chart on the following page, the cognitive, psychomotor and affective aspects of the curriculum are integrated through the clinical education.

# Clinical Education Flow Chart



### **Clinical Evaluation Flow Chart**

1. The student completes the classroom prerequisites.
2. The student begins clinical education by participating in laboratory practice.
3. The student progresses through laboratory practice by completing designated competencies.
4. The student observes a qualified radiographer in the performance of their duties.
5. Clinical education moves from a passive mode of observation to a more active mode by the student assisting the radiographer in performing radiographic procedures.
6. The student attempts designated competencies. If unsuccessful, the student returns to the appropriate practice setting for structured and tailored remediation.
7. As the student gains experience in performing various radiographic procedures and is successfully evaluated and proven competent, a gradual move into a more independent clinical performance stage evolves. At this stage, the student actually performs radiographic procedures under the indirect supervision of the radiographer.

The criteria for successful completion of the program's competency-based clinical education system and how performance is evaluated are provided to both clinical faculty and students.

The Clinical Competency Evaluation System is a planned method of evaluating the overall clinical performance of students, utilizing formal evaluations to demonstrate and document student progression towards clinical competency.

A number of cognitive and psychomotor behaviors are involved in performing a radiographic procedure, including the following:

- Assessing the requisition
- Preparing the radiographic room for performance of the procedure
- Proper patient identification, applying HIPPA regulations
- Communicating with and caring for the needs of the patient
- Observing standard precaution for infection control
- Performing the radiographic procedure
- Providing radiation protection for the patient and staff
- Manipulating the exposure factors while applying ALARA principles
- Evaluating the radiographic image
- Manipulating specialized equipment

These behaviors are assessed by the clinical educator's use of direct, objective observation and are documented through the use of grading scales. The grades for the required competency exams count as 60% of the clinical grade. The program faculty will assess professional development as the student progresses through the clinical education program. This will account for 30% of the clinical grade.

As a part of clinical experience, the student will:

- Subscribe to the basic concepts of the practice of radiology.
- Comply with standards of accuracy and thoroughness.
- Organize time constructively and productively.
- Assist in completing appropriate amount of work in the time expected.
- Respond to the needs of patients.
- Evaluate pressure/crisis situations and respond accordingly.

- Display the appropriate interpersonal relationships with supervisors, peers, patients and other employees.
- Display motivation, interest and responsibility in completing tasks.
- Pursue the ability to reason, interpret and use discretion in carrying out assignments.
- Conform to the attendance/punctuality standards.
- Adhere to the guidelines regarding personal appearance.
- Adhere to the professional standards of conduct.

### **Student Supervision**

Until a student demonstrates competency in a procedure, that procedure is to be performed under direct supervision. A registered radiographer must review the requested procedure and patient condition in light of the student's level of expertise, must be present during the entire procedure and must evaluate and approve the outcome of the procedure.

A final competency evaluation is to be done by a clinical preceptor. After a student demonstrates final competency in an examination it may be performed under indirect supervision. In this case, a qualified radiographer must be immediately available to assist the student. Immediately available means that the supervising technologist is in an adjacent room or area or is in the student's immediate physical proximity. Regardless of the student's level of experience, all repeat radiographs are to be performed under direct supervision. Repeat exams are to be documented and signed by the supervising technologist. These are reviewed by the clinical educator weekly. Mobile and surgical procedures require direct supervision for the entire twenty-one months.

Educating and supervising students optimize student experiences and help ensure that their experiences are educationally sound. It also enhances patient care and helps guarantee that procedures are performed with adequate levels of supervision. Through the vigilance of implementing the concepts of direct and indirect supervision, the integrity of radiologic science education is strengthened. Technologists who are new to the department must first complete the orientation process before participating in student supervision or evaluation. *Students are not to be placed in a situation in which they replace paid staff.*

### **Rotational Schedules**

Clinical education reflects the progression of required competencies from basic to advanced knowledge over the entire educational program through a valid plan for clinical rotations.

The clinical student schedule is under the direction of the program director and the clinical educator. Rotation of students for clinical experience is based on the student's progression in the clinical requirement and at the discretion of the program director and the clinical educator.

Performance outcomes (objectives) are descriptions of observable student behavior. These are required for all of the clinical rotations assigned. Outcomes are provided for (1) the student's scheduled orientation experiences, (2) routine radiographic procedures in the clinic and hospital rooms, and (3) imaging specialties such as pediatric, surgical, mobile, emergency room, trauma, orthopedic, tomographic, and mammographic (optional rotation) procedures. Outcomes are also provided for scheduled specialty areas such as Computed Tomography (CT), Magnetic Resonance Imaging (MRI) and Interventional Imaging. Nuclear/PET and Cardiac Catheterization are limited observation rotations. As the student progresses through the program, increased expectations will be included in the objectives. Rotation outcomes account for 10% of the clinical grade.



Studying during clinical time is discouraged as it does not allow full participation in valuable clinical experience. The time in between exams should be used to stock rooms, prepare the room for the next exam, practice positioning skills and maneuver equipment. This is monitored by the clinical educator.

## **STUDENT POLICIES – ADMISSION**

The Sanford Medical Center Fargo School of Radiography is committed to upholding all federal and state laws that preclude discrimination on the basis of race, sex, age, religion, national origin, marital status, sexual orientation, disabilities, weight, height or veteran's status. The program endeavors to admit qualified applicants interested in pursuing a career in professional radiography. As with all students, applicants will be considered on an individual basis. Up to six students are accepted in the program on a competitive point system each spring. Students who have met the requirements can expect to graduate in 21-months, following successful completion of the structured clinical education plan.

The application form may be obtained from the campus of enrollment or be downloaded from the School of Radiography website. The outcomes data are also available on School of Radiography web site. The completed application and all supporting documentation must be received by December 15. If considered for selection, a personal interview is scheduled the first two weeks in January, weather permitting. Selections are made in one week and the applicants will be notified by e-mail. An acceptance letter must be received within one week of notification with a \$250 acceptance fee included.

Handicapped individuals are considered for admission based on their ability to meet the technical standards as described in the application. No otherwise qualified handicap person shall be, solely by reason of handicap, excluded from participation in the program (American Disabilities Act of 1992).

The program reserves the right to request references from former teachers and employers. Applicants to the program who have been convicted of a crime, including a felony, a gross misdemeanor, or a misdemeanor, with the sole exception of speeding and parking violations, must be aware the charges have to be reported to the ARRT (American Registry of Radiologic Technologists). All alcohol and/or drug related violations must be reported. These violations will be investigated by the ARRT in order to determine eligibility to take the registry. Offenses that were committed as a juvenile and were adjudicated through the juvenile court are not required to be reported. Individuals who have violated the Rules of Ethics may request a pre-application review of the violation in order to obtain a ruling of the impact of their eligibility for ARRT examination. The individual may submit a pre-application form at any time either before entry or after entry into an approved educational program.

### **Criminal Background Checks**

The criminal background check is completed by the campus of enrollment. The information will be shared with the program prior to the interview.

### **Orientation**

Prior to beginning clinical experience at Sanford Medical Center Fargo, students will be informed about confidentiality, Standard Precautions, communicable diseases and radiation safety and monitoring. Students are required to receive the general orientation program offered by Sanford for its associates. The information provided in the general orientation is intended to acquaint the student with Sanford Medical Center Fargo's programs and general policy guidelines.

Orientation to the program policies and the clinical facility is completed the first week by the program staff. Introduction to the radiology rooms will be done in a rotational schedule to allow for a well-rounded orientation. Introduction to radiation protection will also be completed during the first week.

### **Full Time Student Status**

A regular full-time student is one who has met all the pre-admission requirements and is enrolled at an affiliated university.

### **Withdrawal from The Program**

Any student wishing to withdraw from the program will report to the program director. Following an exit interview, the student will be issued a copy of the withdrawal form and the program director will process the paperwork with the University of Enrolment. An unofficial withdrawal results in failure in all courses. The security ID badge and radiation-monitoring badge are to be turned in and the computer access code will be deleted at this time.

If a student withdraws from the program, a portion of the cost will be refunded based on the University of Enrollment's regulatory refund policy. The refund policy is outlined in the campus catalog. The student is to contact the University of Enrollment for further information.

### **Readmission**

Any student who has officially withdrawn from the program and is in good standing may be considered for readmission. The former student must submit a letter requesting consideration for readmission to the program director. Reentry would be a year from the time of withdrawal. This would allow a continuation of the course work and clinical requirements, which are sequenced to build on past learning experiences.

### **Program Assessment**

All phases of the program are assessed to insure quality services are provided to the student, clinical setting and patients. Assessment of outcomes is a systematic, continuous process of collecting and analyzing data about program elements. Through this process, informed decisions can be made to improve quality and effectiveness of the program.

The student will have the opportunity for meaningful input into the improvement of the learning environment through regular formal assessments. Areas such as admissions, employer surveys, postgraduate evaluations, instructor's teaching abilities, American Registry of Radiologic Technologists (ARRT) scores, student satisfactions surveys, competency exams and portfolios are assessed. The Outcome Assessment Committee is an active integral part of assessing the quality of the program and providing important input into the necessary clinical skills needed of the graduates.

## STUDENT POLICIES – DISCIPLINE

### Code of Ethics-ASRT and ARRT

The profession of radiologic technology shares the ethical concerns of other health professionals toward promoting good patient care. Radiologic technologists have emerged as health care professionals in their own right, as witnessed by their educational programs, licensure requirements, professional associations, journals and a unique code of ethics that reflects their professional function in the health care arena.

The Code of Ethics serves as a guide by which radiographers may evaluate their professional conduct as it relates to patients, health care consumers, employers, colleagues, and other members of the health care team. The Code of Ethics is intended to assist radiographers in maintaining a high level of ethical conduct and in providing for the protection, safety and comfort of patients.

1. The radiologic technologist conducts himself/herself in a professional manner, responds to patient needs and supports colleagues and associates in providing quality patient care.
2. The radiologic technologist acts to advance the principal objective of the profession to provide services to humanity with full respect for the dignity 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 regardless of sex, race, creed, religion, or socioeconomic status.
4. The radiologic technologist practices technology founded upon theoretical knowledge and concepts, utilizes equipment and accessories consistent with the purposes for which they have been designed, and employs procedures and techniques appropriately.
5. The radiologic technologist assesses situations, exercises care, discretion and judgment, assumes responsibility for professional decisions, and acts in the best interest of the patient.
6. The radiologic technologist acts as an agent through observation and communication to obtain pertinent information for the physician to aid in the diagnosis and treatment of the patient and recognizes that interpretation and diagnosis are outside the standard 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 health care 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.

The Board of Trustees of Sanford Medical Center Fargo has established a statement of organizational ethics in recognition of Sanford's responsibility to its patients, associates, and others in the community. All Sanford's subsidiaries, board members, medical staff, employees, vendors, students and volunteers are expected to act in a manner that is consistent with this organizational statement and shall be guided by the following general principles:

### RESPECT FOR THE PATIENT

All patients will be treated with dignity, respect and courtesy. Patients and their authorized representatives will be provided sufficient information to make informed decisions with respect to consenting to or refusal of medical care and treatment. Whenever possible, the beliefs and customs of the patient will be accommodated. Admission, transfer, referral, and discharge decisions regarding patients will be based upon medically appropriate and legally permissible factors.

### RESPECT FOR SANFORD ASSOCIATES

All Associates are entitled to be treated with respect, fairness and dignity. Conduct, which creates a hostile or discriminatory environment, will not be tolerated. In a manner consistent with Sanford's best interest, Sanford will provide equal employment opportunities for all qualified individuals; equitably administer employment policies and practices; and, when consistent with patient needs, accommodate religious or moral values of caregivers. Confidential personnel information will be released and used only in the manner permitted by Sanford Medical Center Fargo's policies and applicable law.

### CONFIDENTIALITY OF PATIENT AND PROPRIETARY INFORMATION

Sanford Medical Center Fargo recognizes the need to maintain patient and other information in a confidential manner. Confidential patient information will only be released or accessed in the manner authorized or permitted by Sanford Medical Center Fargo policies and applicable laws. Sanford Medical Center Fargo's own proprietary information shall also be treated as confidential and may not be released without Sanford Medical Center Fargo's consent. All Sanford Associates must maintain Sanford's policies and safeguards to prevent the unauthorized release of patient and proprietary information.

Students are obligated to adhere to Sanford Medical Center Fargo's policies and procedures regarding confidentiality of all patient information records.

### **Scholastic Honesty**

All students must maintain scholastic honesty during their association with the Program. Forms of scholastic dishonesty include cheating, plagiarizing, falsifying and colluding.

The following is a list of the types of problems considered:

1. Cheating on a test by copying from another student.
2. Possessing/using unauthorized materials during a test.
3. Collaborating or working together with another without proper authorization.
4. Soliciting or knowingly using a test that has not been given in whole or in part by buying, stealing, or bribing.
5. Allowing another student to complete your course work.
6. Completing course work for another student.
7. Impeding fair access to assigned materials.
8. Tampering with another student's work.
9. Alteration of grades or any other records related to academic performance.

Faculty members are responsible for providing guidelines concerning cheating and plagiarism at the start of each course. Students have the right to be informed when they are suspected of violating academic principles and have the right to a fair opportunity to refute them. Faculty will determine the penalty regarding forms of scholastic dishonesty and may recommend a disciplinary sanction to the Program Director. Falsifying records to gain admission to the program will be considered reason for dismissal.

## **Suspension**

Suspension is used when time is needed to thoroughly investigate an incident. Also, it is used in cases of serious infractions where dismissal is being considered. The program officials and the advisory committee review the investigative findings and the resulting recommendations. Written notification of reason for suspension and dates are provided to the student. All time missed due to suspension will be made up at the discretion of the program director or instructors.

A student who has been suspended may appeal the suspension if there were extraordinary circumstances beyond the student's control that were unknown by the program when the decision was made. Following the written notification of suspension, appeals must be made in writing to the program director. Properly submitted appeals will delay implementation of the suspension until the appropriate appeals procedure has been implemented. If the appeal is denied, the student will be required to withdraw from the program if the findings result in reason for dismissal.

## **Probation/Dismissal from the Program**

Probation status is given to the student in writing, indicating the need to improve and attain satisfactory progress in the clinical and/or classroom grade. The student must write a plan of action for making up deficiencies. Failure to achieve satisfactory progress at the end of the probationary period will result in dismissal. Only one probation term is permitted during the 21-month education period.

The School of Radiography reserves the right to dismiss any student whose class-work, health, conduct, or clinical practice makes it inadvisable for the student to remain in the program. Dismissal from the program may result from:

1. Unprofessional or unethical behavior.
2. Academic failure in a classroom course and failure to maintain progress in the competency evaluations.
3. Violations of personal and professional conduct, scholastic honesty, or public law.
4. Behavior which may endanger the patients and staff.
5. Repeated tardiness and absenteeism.
6. Abuse of alcohol and/or drugs.
7. Unlawful manufacture, distribution, dispensing, possession or use of controlled substance.
8. Theft of property.
9. Insubordination.
10. Release of confidential information about a patient.
11. Internet or computer access using an employee's password.
12. Continued documentation of unmotivated behavior and unwillingness to take the initiative in the clinical setting.

## **Conduct Subject to Program Discipline**

The following is a list of actions that will result in possible dismissal. It is intended to illustrate and is not inclusive.

1. Theft or misappropriation of personal or Hospital property.
2. Unauthorized entry into or presence within the Health System.
3. False statements on admission, identification or other official documents involving the Program and the Hospital.
4. Abuse or misuse of substances. This includes use, possession, sale or distribution of controlled substances or illegal drugs.

5. Insubordination.
6. Disclosure of confidential material.
7. Repeated tardiness, failure to call the program officials and clinical area when absent or because of illness.
8. Unauthorized and improper usage of computers.
9. A student may be given an official warning and subsequent probation, for continued failure in assignments over a period of time, or an attitude depicting a lack of motivation and interest as documented by program officials over a period of time. Continuation of the condition after a term of probation will be considered grounds for dismissal.
10. Failing grades in the classroom and/or clinical competency evaluations.
11. Jeopardizing patient safety.
12. Performing x-ray procedures without a physician's orders.

### **Disciplinary Action**

Violations of expected personal and professional conduct, scholastic honesty, or public law will be handled according to the infraction. A serious breach of personal and professional conduct, or legal infraction may result in disciplinary action. All actions are reported on a separate document and kept in the student's file. Faculty may implement the following as disciplinary action for violations of expected scholastic honesty-academic violations:

- A lower or failing grade or score on the assignment or examination
- Assignments of additional work to provide evidence of the student's academic performance and/or evidence that the student has learned the course material.
- Reprimand, probation, suspension or dismissal as defined below for a serious infraction

The program officials will deal with nonacademic violations for student conduct. Any of the below sanctions except will be presented to the Program Director by the faculty, clinical educator or clinical staff.

- Reprimand – a written statement by program faculty or clinical staff expressing disapproval of conduct. A copy is placed in the student's file. This reprimand will be discussed with the student immediately with the person(s) involved.
- Probation – a conditional retention of student status for a period of not less than one term. A written probation form will be reviewed with the student, indicating areas where improvement is required. The student has one term to address the deficiencies.
- Suspension – a separation from the program for a designated amount of time. At the conclusion of the suspension, the student will be permitted to return on a probationary status. All time missed due to suspension will be made up at the discretion of the program staff. Appeal may occur.
- Dismissal- an indefinite separation from the program. The program reserves the right to dismiss any student for cause at any time.

### **Grievance Policy / Due Process**

A grievance is defined as any academic or nonacademic problem resulting from an alleged unfair, inequitable or discriminatory interpretation, application or implementation of a policy or procedure. A grievance can also result from an issue that may initiate from a nonspecific policy or procedure. An academic grade is not an issue for grievance.

The student who has an academic or nonacademic grievance as a result of a specific event or circumstance will follow the student grievance process. A student may seek outside legal counsel; however, the legal counsel may

not represent them at the grievance hearing, as it is a closed hearing. The student also has the opportunity to communicate the issue with the Sanford Medical Education Director, as explained during the orientation class.

### **Grievance Procedure**

If a student feels they were treated unfairly because of the application of a policy or program decision, the student has a right to make their problem, complaint or disagreement known to the program, and has the responsibility to do it in a timely, non-disruptive manner. The following process is recommended when addressing these types of issues. A more detailed outline of the process is presented during orientation.

#### Guidelines

1. The student discusses the issue with the person involved.
2. If the student is not satisfied with the response, they are to state the issue and requested resolution in writing to the program director. The Grievance Resolution Form is available for this purpose. The program director will review the information and investigate further, if necessary, and will provide the student with a written response to their concern. All information is considered confidential and is discussed with those who have a need to know.
3. If the student is not satisfied with that response, the process may continue to be presented to the advisory committee. The final decision will be made at this level and is a closed hearing. Final decision is binding.
4. Discrimination complaints are to be filed directly with Human Resources at Sanford Medical Center Fargo.

#### Time Lines

Students have the responsibility to present problems and concerns in a timely manner. The program will make every effort to respond to the concern within one week of receiving the Grievance Resolution Form.

### **STUDENT POLICIES – ATTENDANCE**

The academic calendar printed in the first page of the handbook will indicate beginning and ending dates of each term. Vacations and holidays also are reflected in the calendar. There is a total of nine weeks of vacation time built into the 21-month academic calendar for holiday breaks and spring break.

There are various types of absence leave categorized as follows: personal time hours, extended sick leave, compassionate leave, and major/catastrophic event leave. It is the responsibility of the student to make up all academic assignments that are missed during leave. Clinical time that is missed may or may not be made up depending on the type of leave.

#### **Personal Time**

The student is granted 40 hours of personal time each year in the program. 40 hrs. will be granted from the start of the program through the first week in August for year one. 40 hrs. will be granted when the program resumes after the August break through graduation for year two. You cannot “carry over” time from year one to year two. If you go over your time allotted per year, this time will need to be made up. This time is to be used for personal time off, sick days, and personal reasons. Students are encouraged to schedule vacations, trips and extended time off during the nine weeks of scheduled breaks. The final weeks of school is crucial in preparing the student for the registry exam. *Therefore, personal time will not be granted during classroom time the **final two weeks** of school. If the student has personal time left at the end of the twenty-one months, the student will not be allowed to just take an hour or two in the morning in order to “sleep in”. This is considered unprofessional behavior and these requests will not be approved.*

1. Scheduling Personal Time- When a student would like to take personal time, a request must be submitted to the program director and/or clinical educators via email and by entering your request in Trajecsys. This request is *subject to approval* by the program director and clinical educators. The student must notify the clinical site of the planned absence as well. Students must submit a personal time request a minimum of one week in advance or the request will be denied.
2. Illness-It is the responsibility of the student to notify the program director and/or the clinical educator as well as the supervising technologist of their clinical site of an illness. This notification process should occur on a daily basis if the student is ill for more than one day. Notification may take place in the form of a phone call or text message to the program director/clinical educator’s personal cell phone or office phone.
3. The student must be the one to notify the clinical educator/program director if he/she will be absent. It is not appropriate to leave messages with classmates/others to communicate an absence. It is the responsibility of the student to notify the proper staff members of his/her absence.

*\*\*Note-If a student calls in sick or leaves a shift early due to their own illness, they are not allowed to return to class/clinical later that day.*

4. Personal time will be logged in the following manner:
 

|  |
|--|
| <ol style="list-style-type: none"> <li>a. Taking the morning off 7:30am to 12:-00pm – the student logs 4.5 hours</li> <li>b. Taking the afternoon off 12:30pm to 4:00pm – the student logs 3.5 hours</li> <li>c. Taking the whole day off 7:30am to 4:00pm – the student logs 8 hours</li> </ol> |
|--|
5. Documentation- All personal time is to be documented in Trajecsys.

#### **Extended Sick Leave**

Extend sick leave is a bank of twenty (20) hours that can be utilized by a student if he/she uses a minimum of three (3) consecutive days of personal time due to personal illness. Extended sick leave can only be used once during the 21-month period, regardless of the number of hours used. A student cannot make more than one withdrawal from his/her extend sick leave bank, it is a onetime use only.

1. In order to return to school after three (3) consecutive days have been missed due to illness, a physician’s note must be presented to the program director and/or clinical educator.
2. Any time used from the extended sick leave bank must be made-up.

#### **Major/Catastrophic Leave**

This type of leave is in place for self, dependent child, spouse, pregnancy/maternity/paternity, major surgery, disease, condition or treatment that requires forty (40) or more consecutive hours of medical leave.

Major/Catastrophic can only be used once during the 21-month period, regardless of the number of hours used; it is for one time use only. This leave allows a student to take up to, but not more than 240 hours of clinical leave and up to but not more than two consecutive weeks of didactic instruction.

1. All time used during this type of leave must be made-up.

#### **Compassionate Leave**

In the event of a death in the student’s immediate family, compassionate leave may be granted. Immediate family includes the student’s spouse, parent, child, grandparent, parent-in-law, brother, sister, guardian, or legal dependent. It is the responsibility of the student to notify the program director and/or clinical educator.

1. The student will be granted up to four (4) days for compassionate leave, these hours do not count as personal time and do not need to be made up.
2. Any missed assignments will need to be made up.



3. If needed, the student may request an additional three (3) days of compassionate leave. These additional hours must be made up.

### **Make-up Time**

Make-up time is allowed only for students who have tapped into their extended sick leave, major/catastrophic leave and/or compassionate leave. If a student is required to make up hours that were missed, they must do so by coordinating a time with the program director and/or clinical educator. Make up time is to be granted at the discretion of program staff.

1. Make up time cannot be completed on holidays that are observed by Sanford Medical Center Fargo or Sanford Medical Center Fargo School of Radiography.
2. Staying after the assigned clinical hours for studying purposes will not be makeup time.
3. Staying after the assigned hours in the clinical setting will not be makeup time unless there is a learning experience to document and the clinical educator has decided it is a valid learning experience.
4. Make-up time is not to be confused with working after school hours in the Radiology department as a “tech assistant” This does *not* count as make-up time.
5. During scheduled school vacation breaks, make-up time may be allowed following approval by the program director/clinical educator.
6. Make up time can be no longer than 10 hours per shift.
7. If make-up time results in the student completing more than 6 consecutive hours, the student must take a 30 minute meal break.
8. When a student is making up time, the student must obtain a technologist signature stating the time was made up accordingly.
9. The student must log this time in Trajecsyst.

### **Compensatory Time**

The student is offered opportunities throughout the program to add personal time hours to their “bank” by participating in volunteer activities, community events and professional meetings.

1. Examples of volunteer opportunities include; Medical Explorers and Camp Hope.
2. Attendance at a professional meeting may count if it has been approved by the program director/clinical educator. The hours are for meeting time only—not banquet and entertainment time.
3. All compensatory time is at the discretion of the program director/clinical educator.
4. All compensatory time must be logged in Trajecsyst

### **Improper use of Personal Time**

1. If a student calls in to take a personal day when he/she does not have any time left, a double deficit will be required to be made up before graduation. For example: If a student calls in Monday morning to take the day off but doesn’t have any personal time left, he/she will be required to make up 16 hours, for the 8 hours of absence.
2. If a student repeatedly fails to record his/her personal time taken in Trajecsyst, a double deficit will also be required to be made up before graduation.
3. If a student does not notify program officials of an absence, a written warning will be given. A repeated offence will result in probation and the third offence will result in dismissal.

### **Tardiness Policy**

Students are expected to be present for all clinical and classroom assignments in a timely manner. Tardiness will not be tolerated.

1. The student must be clocked in, wearing the appropriate uniform for their clinical rotation and in their assigned clinical area before the start of the clinical rotation.
2. Clocking in and out will be done on Trajecsys utilizing a Sanford Medical Center Fargo computer within the radiology department only. The student may *not* clock in and out on his/her cell phone.
3. The student is allowed to clock in up to 10 minutes before the scheduled clinical rotation. For example: If the student is scheduled to start clinical at 7:30, the student would have from 7:20-7:30 to clock in.
  - a. If a student forgets to punch in but was in the clinical area on time, a note must be made in Trajecsys by the clinical staff stating the student was witnessed in the department on time.
4. If a student is tardy, he/she must fill out the "*late arrival notification*" form located in Trajecsys.
  - a. This is to be done on the honors system. If you are tardy, it is your job to take professional responsibility for your actions.
  - b. If a student does not fill out the "*late arrival notification*" form, a written warning will be given.
5. If a student is routinely tardy, disciplinary action will take place.
  - a. If a student has 3 occurrences of tardiness, a written warning will be given.
  - b. The 4<sup>th</sup> occurrence will result a loss of 8 hours of personal time
  - c. The 5<sup>th</sup> occurrence will result in an additional loss of 8 hours of personal time and a deduction in clinical grade.
  - d. The 6<sup>th</sup> occurrence will result in a probationary period.
  - e. The 7<sup>th</sup> occurrence will result in a dismissal from the program.

### **Program Attendance Record**

The program provides clinical schedules that indicate the dates and times for all clinical experiences. Students are to review the academic calendar for schedule variations such as breaks and holidays.

In the event that a student is unable to participate in a scheduled clinical activity because of personal business or illness, it is important to notify the program director and clinical educator. Absenteeism and tardiness are documented and if excessive may result in disciplinary action. In order to complete the program, it is necessary to document the number of hours in the clinical phase. The attendance procedure is listed below:

- All clinical time is logged in Trajecsys.
- Students must avoid clocking errors. After the Labor Day weekend through the end of the program, the student will be allowed only **10 time exceptions** before a written warning will be given. Any additional time exceptions will result in a deduction in clinical grade.
- Report directly to the clinical educator for your specific assignments. Although these are posted in weekly increments, they are subject to change as the clinical experiences change.
- If you are unable to report for duty for reasons of illness or emergency, you are required to call and notify the clinical educator at beginning of clinical time. Messages are not to be left with others to communicate absences. Make-up time will be established if sick time/personal leave time has been exceeded.
- The total hours of student's didactic and/or clinical education will not exceed 40 hours per week.
- The clinical educator is responsible for verifying the hours and evaluating your monthly progress. The professional development evaluation will also be part of your clinical grade.
- Clinical/didactic hours are 7:30AM-4:00PM, Monday through Friday.

### **Military leave/Jury Duty**

If a student is activated for military duty, the program officials will determine length of time for completion of program upon return from active duty. Jury duty does not need to have hours taken from personal time.

## **STUDENT POLICIES – SAFETY, SECURITY AND STUDENT LIFE**

### **Student Behavior Code**

Students are required to abide by policies and procedures of Sanford Medical Center Fargo System and the Program. Students are also expected to abide by the Code of Ethics of the American Registry of Radiologic Technologists/ASRT. Failure to adhere to these may result in disciplinary action against the student. The specific steps in the disciplinary procedure are outlined in this handbook. A repetition of infractions may result in dismissal from the Program. In all cases, students have the right to appeal all unfavorable evaluations, disciplinary actions, and dismissals.

### **Sexual Harassment/Offensive Conduct/Aggressive Behavior**

The Hospital and Program do not tolerate sexual harassment or discrimination of any kind. It is the organization's policy to maintain an environment free from discrimination and from offensive or degrading remarks or conduct. The Hospital and Program do not tolerate inappropriate behavior or harassment in any form, whether verbal, physical, or psychological on the part of its managers, employees, students, visitors, vendors, or patients.

#### Sexual Harassment

The Hospital and Program do not tolerate sexual harassment of its associates by anyone, including supervisors, other associates, physicians, patients, or others who enter the facility for any reason. Hospital associates are assured of an environment free from unsolicited and unwelcome behavior of a sexual nature.

#### Other Harassment

The Hospital prohibits other forms of harassment which include racial slurs inappropriate jokes or derogatory remarks or any physical aggression relating to another person's race, age, handicap/disability, religion, national origin or another person's sex or sexual preferences. This includes but is not limited to threatening, intimidating, coercing, using abusive or vulgar language, interfering with the performance of other associates, or any other conduct which creates a hostile or offensive working environment.

#### Aggressive Behavior

The Hospital will not tolerate aggressive behavior on Hospital property and facilities by anyone. Physical or verbal aggression or attacks will be reported to Hospital Security Services, program officials, or local law enforcement authorities. Aggressive behavior is defined as:

1. Threat: An expression of an intent to cause physical harm communicated verbally or by letter, telephone or e-mail (includes the expression of intent to cause physical harm, which may be psychologically traumatic even if never carried out).
2. Physical assault: Aggression resulting in physical harm, which would include attacks, ranging from an aggravated push, slap and hit to the use of weapons which would result in either wounds or no physical injury at all.

This type of behavior listed above will not be tolerated and each associate of the Sanford Medical Center Fargo has an option to pursue legal actions against anyone who may perpetrate such actions.

### **Confidentiality**

Students are obligated to adhere to Sanford Medical Center Fargo's policies and procedures regarding confidentiality of all patient information records. Information gained in the process of the internship regarding

patients, doctors, associates, financial data and technology shall be considered confidential information. Discussion of this information must be confined to educational related purposes and must be conducted in appropriate areas where privacy can be maintained. Unauthorized release of confidential information is grounds for disciplinary action including termination. Legal action may be taken, as improper observation of the confidentiality policy could result in a felony conviction

### **Dress code**

The Program's policy regarding professional appearance outlines the acceptable uniform for the student.

- **Name Badge:** Security identification badges will be worn at all times above the waist and visible to patients, visitors, and fellow employees.
- **Piercings/jewelry:** Jewelry should be conservative and appropriate. Examples of inappropriate piercings/jewelry may include facial jewelry, large ear jewelry (plugs, gauges) or excessive pieces of jewelry.
- **Hair (including facial hair):** Hair should be clean, combed, and neatly trimmed. Hair should be a natural color. Long hair should be pulled back, pony tails need to be neat and clean.
- **Footwear:** Shoes must be clean, polished and in good repair. Clogs, backless and strapless shoes are not allowed. Socks or hosiery must be worn by all individuals who have patient contact. A pair of clean athletic-type shoes should be worn in the clinical setting. Footwear must completely cover the entire top of the foot and shoes must have no holes. Footwear must be consistent with OSHA requirements or as required by state and/or federal regulations. Footwear should be mostly black or white.
- **Appearance:** Authorized attire will be kept neat and clean. Scrubs and undershirt should fit and cover properly. Scrub pants should not be dragging on the floor. Cosmetics are to be worn conservatively.
- **Fingernails:** Nails should be well kept, less than ¼ of an inch in length and conducive to giving patient care. Acrylic nails or gel polish (shellac) are not allowed. Well maintained nail polish is permitted but cannot be chipped or cracked.
- **Clinical Attire:** Dark gray scrubs will be required for attire (2-3 pairs are recommended). The scrubs may be purchased at any uniform shop. White or gray t-shirts may be worn under the scrub shirt-no logos are to be visible. T-shirts are to be tucked in and not hanging below the scrub shirts. Hospital owned scrubs are for in-house wear only and are provided by a scrub dispersing unit. Scrub jackets are to be buttoned up, not hanging open or tied around the waist.
- Gum chewing is not allowed in the clinical setting.
- **Classroom Attire:** Students are permitted to wear business casual attire or gray scrubs while in the classroom setting. Sweatpants and jeans are not permitted in this professional setting.
- **Offensive Odors:** Strong scents such as perfumes or shaving lotions can be offensive to patients and should be minimal. Tobacco use is prohibited at Sanford and odors that are disruptive or offensive to others are unacceptable.
- **Tattoos:** Visible tattoos must be covered.

\*\*Dress code violations will result in a deduction of clinical grade.

Students will be responsible for complying with the dress codes and for having their clothes laundered and replaced if worn, torn, or faded.

## **Student Health**

All students will receive education/orientation information from the Leadership, Education and Development department at Sanford.

The education/orientation requirements include:

- 1) HIPPA training
- 2) Immunization verification form, which includes proof of immunity to measles, mumps, rubella and varicella (chicken pox) through either vaccination or a titer. Document of TB test results that are dated on or after 1 year prior to start date and either the dates you received the Hepatitis B vaccination or a signature on the Hepatitis B declination statement.
- 3) Vocational training insurance consent form
- 4) Student orientation to Sanford Medical Center Fargo information
- 5) Proof of Health Insurance

All the completed forms and supporting documentation are to be returned to the Leadership, Education and Development representative.

Sanford Learning and Development  
5225 23<sup>rd</sup> Ave S  
Fargo, ND 58104  
Phone-701-417-4837

Students are to carry medical insurance throughout the program and are responsible for full payment of all hospital, emergency room visits, walk-in clinic visits, and physical examination. Proof of insurance is required prior to start date. Students are required to abide by the Sanford Medical Center Fargo vaccination policy.

## **MRI Safety**

Students will have potential exposure to the magnetic resonance environment. To ensure the safety of the student, the students will observe an MRI safety video and complete a MRI screening form the week of orientation. A copy of this MRI screening form will be kept in the student file students are required to inform program staff if there is a change in medical condition requiring a new screening form to be filled out. Prior to the MRI clinical rotation, students will complete the ASRT MRI Compliance Module with a passing score.

## **Drug/Alcohol Policy Statement**

Sanford Medical Center Fargo is committed to maintaining an environment, which is free from the influence of illegal drugs and alcohol to protect the health, safety, and well-being of our patients, associates, and visitors. Sanford Medical Center Fargo prohibits the use, possession, transfer, and sale of alcohol and illegal drugs while on all premises owned or operated by Sanford Medical Center Fargo. For students, it prohibits reporting to the classroom and/or clinical setting under the influence of illegal drugs or alcohol. If a student reports to the clinical assignment and has an odor of alcohol or is apparently continuing to be under the influence of alcohol/drugs, the program director/clinical educator may send the student home with make-up time to be done at the discretion of program officials. Violation of this policy may result in discipline up to and including dismissal. Chewing tobacco is not allowed during program hours, including both clinical and didactic time.

## **Grounds for Testing**

Sanford Medical Center Fargo has a Drug and Alcohol Testing Policy which provides for testing for the following reasons: Reasonable suspicion and in connection with a treatment program.

Testing may be required in the circumstances below. Sources of testing will be urine and blood. The testing will be done at the student's expense.

1. Reasonable Suspicion

A student may be required to undergo drug and alcohol testing if there is a reasonable suspicion that the student is under the influence of drugs or alcohol, has violated the policy statement above, has sustained or has caused another associate to sustain a personal injury, has caused a work-related accident, or operated equipment involved in a work-related accident.

2. Treatment Program

A student may be required to undergo drug testing if the student was referred to a chemical dependency treatment or evaluation, or is participating in a chemical dependency treatment program. In either case, the student may be required to undergo drug testing without prior notice during the evaluation or treatment period and for the remainder of their internship.

**Injury/Illness, Occupational Exposure Reporting**

Prior to beginning clinical experiences, students will be informed about Standard Precautions and communicable disease exposure including:

- the nature of occupational exposure
- a description of Standard Precautions
- protocol for post exposure follow-up and potential restrictions

In the event there is an exposure incident involving a student, Sanford Medical Center Fargo's procedures and protocols regarding employee exposures shall be followed. Infection control of Quality Management Services is available to students for consultation.

Any illness or infection should be reported to the program director. Student's clinical rotation and classroom activities may be altered during illness at the discretion of the faculty member. In case of emergency, a student will be sent to the Emergency Department. The person designated on the application form as the emergency contact will be notified if the student is unable to do so. Students admitted to the hospital are under the same regulations as other patients. If illness is prolonged and interferes with the course of study, it may be necessary for the student to request an incomplete grade or withdraw from the program and return at a later date.

Communicable diseases of potential significance to patients or other associates should be reported to the Occupational Health. Students who become ill while in the clinical setting or classroom are to report to the program director or clinical educator. Depending on the severity of the illness or injury, the program director may refer the student to Occupational Health, the Emergency Room or to their personal physician, or may allow the student to continue in their clinical assignments.

Students who are possibly exposed to pulmonary or laryngeal TB, meningococcal disease, viral hepatitis, HIV, or childhood diseases such as chickenpox, pertussis, measles, mumps or rubella (ONLY if not immune) should complete the INJURY/ILLNESS report and contact Occupational Health.

The primary action following an accident, injury or exposure to an individual on Sanford Medical Center Fargo property is to assure that the victim receives prompt treatment of the injury or exposure. A report is required for every accident, injury or for any exposure of an associate, patient, or visitor to an environmental condition that may be hazardous to the associate's health. These reports are to be completed as soon as possible after the incident and forwarded to Occupation Health Services.

### **BLS Certification**

Students are required to become BLS certified. After certification, verification of current BLS certification must be given to the program director to be put in the student's file. It is required that this certification is kept current while attending the program.

### **Student Rights and Responsibilities**

Students have a right to a sound education:

- a right to and a responsibility for having a creative educational opportunity;
- a right to and a responsibility for achieving input into curriculum planning;
- a right to and a responsibility for achieving self-directed learning;
- a right to and a responsibility for achieving equal participation in all areas of clinical practice; a right to and a responsibility for participating in interdisciplinary activities.

Students have a right to due process;

- a right to and a responsibility for insuring faculty review and self-evaluation.

### **Participation in Outcome Assessment Committee**

An outcome assessment committee meets annually to review and evaluate the quality and effectiveness of the educational process in order to assure achievement of student learning outcomes and the program's mission and goals. Students complete assessments of each rotation, class and instructors at the end of each term. A student representative is selected by the class during orientation in the first year and will function as a representative to the campus of enrollment.

### **Student Records**

Student records are kept in a locked file cabinet in the program director's office. The student may review only their file with the program director in attendance. The file will contain the application form, transcript, radiation-monitoring log, release forms, and progress reports.

The School of Radiography complies with the Family Education Rights and Privacy Act (FERPA), which was designed to protect the privacy of education records, to establish the right of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings.

No one outside the program shall have access to nor will the program disclose any information from the student's education records without the written consent of the student except to personnel within Sanford Health, to officials of other institutions in which students seek to enroll, to persons or campuses providing financial aid, to the program's accrediting agency- the Joint Review Committee of Education for Radiologic Technologists, to persons in compliance with judicial order, and to persons in an emergency in order to protect the health or safety of students or other persons. All these exceptions are permitted under the Act.

Students may have copies made of their records with certain exceptions; a transcript of an original or source document which exists elsewhere, or a copy of academic record for which a financial "hold" exists. Students may not inspect and review the following as outlined by the Act: financial information submitted by their parents, confidential letters and recommendations associated with admissions, employment or job placement, or educational records containing information about more than one student. For the latter example, the program will permit access only to the part of the record that pertains to the inquiring student.

### **The Family Educational Rights and privacy act of 1974**

The Family Educational Rights and Privacy Act of 1974, as amended, is a Federal law which states that a written institutional policy must be established and that a statement of adopted procedures covering the privacy rights of students be made available. The law provides that the institution will maintain the confidentiality of student education records.

A copy of the Family Educational Rights and Privacy Act of 1974 is located in the program director's office and can be reviewed upon request. If the program fails to comply with this act, students have the right to file complaints with the Family Education Rights and Privacy Act Office.

### **Activities and Organizations**

Students are encouraged to participate in community activities and professional organizations, as this adds to the enrichment of student life and enhancement of professional education. Attendance and participation at the annual North Dakota Society of Radiologic Technologist's (NDSRT) state convention is included in the program curriculum. A membership to the national organization, American Society of Radiologic Technologists (ASRT) will be included in the student fees. The students will also be provided with a membership to the North Dakota Society of Radiologic Technologists (NDSRT). Through these organizations, students become familiar with the structure, purposes and function of professional radiology organizations and exchange ideas and information with their peers.

### **Secondary Employment**

The student may hold a secondary position as long as it does not interfere with clinical hours and rotational schedules. If the student finds time-management to be problematic while attending the program and being employed, priorities will need to be established. If employed by Sanford Health after clinical hours, competency evaluations are not to be done during these hours. The program does not become involved with after-hour employment contacts and altering student's schedule to accommodate such.

### **Pregnancy Policy**

A pregnancy policy has been developed by the program and is reviewed during the interview. It is the goal of this policy to ensure that the pregnant student be informed of the regulations regarding the declared pregnant student which will allow a decision to be based on her individual needs and preferences.

Any female student has the option of informing the program officials of her pregnancy. If the student chooses to voluntarily inform officials of her pregnancy, it must be in writing and indicate the expected date of confinement (delivery). In the absence of this voluntary, written disclosure, a student cannot be considered pregnant.

If the student does choose to disclose her pregnancy, the program officials will give information to the student to read on pregnancy and radiation exposure. The program will set up a meeting with the student and Diagnostic Radiological Physicist (DRP) to discuss this information and any additional radiation protection measures, and to modify the student's work schedule if necessary to limit time in high exposure areas. The student will sign a form acknowledging the receipt of that information and to document the discussion with the DRP. The declared pregnant student has the option of continuing the educational program without modifications or interruption, modification in clinical assignments, leave of absence from clinical assignments, and/or leave of absence from the program. If the student wants withdrawal of the declaration, there must be a written declaration for such from the student.



In most cases where good radiation safety techniques are practiced, no change in the clinical situation is necessary. A second film badge will be issued if working in fluoroscopy where increased exposure might be received. This badge is to be worn at the waist level under any protective shielding.

The Pregnant Radiation Student Form and the Pregnancy Policy are to be reviewed and signed prior to starting date of the program. This policy is reviewed with the student prior to the interview and is included in the orientation folder to be reviewed during the first week.

### **Fire Safety Policy and Procedure**

Follow the **R.A.C.E.** protocol when responding to actual or potential fires:  
**R**escue anyone in immediate danger; move them to a safe, nearby location  
**A**lert, call for help 9-911 and give exact location of fire  
**C**onfine the fire; close the doors  
**E**xtinguish the fire if you can safely.

If using a hand portable fire extinguisher, remember **P.A.S.S.**

**P**ull the pin

**A**im the extinguisher at the base of the fire

**S**queeze the handles of the extinguisher

**S**weep the stream of extinguishing agent across the base of the fire

### **Fire Safety Tips**

DO NOT DELAY in reporting fire or smoke. Keep corridors free of obstructions. Do not store things in stairways. Ensure that fire doors are not blocked. Do not use elevators in fire emergencies. Use the red pull boxes to report fires. Know your assigned duties for a fire emergency and the locations of the nearest fire. Locate fire alarm pull stations and fire extinguishers in your work area

### **Hazardous Materials and Waste**

The Hazardous Materials Management Program is intended to promote a safe, controlled environment for Sanford's customers, visitors, students, associates and other uses of the facility. The following must be observed:

- Know where the Safety Data Sheets (SDS) are for the area you are assigned.
- Be familiar with the safe and intended use of hazardous materials in your area.
- Know the clean-up procedures for hazardous spills.
- Use the proper personal protection equipment when handling hazardous materials.
- Know how to obtain spill kits (available from Pharmacy).

### **Severe Weather Information**

A *watch* means that weather conditions are favorable for the development of severe thunderstorms, tornadoes or severe winter weather. You should go about your normal activities but stay updated on the latest weather developments and be prepared to go to a place of safety.

A *warning* means that severe thunderstorms, tornadoes, or severe winter storms have been reported or indicated on radar in the warning area. If you are in the warning area, instructions will be given to you in the clinical area as to shelter seeking areas. Refer to the SOP for Fiechtner Drive as to what the process is should a weather warning occur during classroom time.

In the event of severe weather, Sanford Medical Center Fargo School of Radiography will abide by the following cancellation policy:

1. If NDSU cancels class due to inclement weather, Sanford Medical Center Fargo School of Radiography will also be closed.
2. If a "no travel advised" is issued for the Fargo/Moorhead area, Sanford Medical Center Fargo School of Radiography will be closed.

\*\* All other weather related cancellations are up to the discretion of the program director and /or clinical educator.

### **Security**

Security Services include 24-hour patrol of Sanford Medical Center Fargo and grounds, television surveillance, escort service to parking ramp and car starting. Security does not routinely patrol the School of Radiography at Fiechtner Drive. Photo ID/Security badges are issued at the beginning of the program. All students must wear badges in the clinical setting. This will permit access to secured areas where you will be assigned.

All students are asked to safeguard their personal items while in the hospital setting. Do not bring excessive amount of money or valuables to the clinical setting.

### **Computer and Software Policy**

All users of Sanford Health's Internet services must abide by the terms and conditions of this policy. Violation of the terms and conditions contained throughout this policy is a serious offense and may result in access privileges being withdrawn, legal action or action in accordance with Sanford Health's general terms and conditions, depending on the nature of the offense.

The use of the Internet shall be consistent with existing Sanford Health policies regarding use of corporate computers: It shall be used only for learning functions, Sanford Health business, Data, files, and E-mail shall be considered owned by Sanford Health and available for review by a supervisor. Electronic systems may be monitored from time to time to assure they are being used for business-related purposes. Data sent and received via the Internet should not be considered confidential.

E-mail addresses are not to be released outside the organization except at the discretion of the individual employee. Usage of another's password is strictly forbidden and is reason for dismissal. Certain sites on the Internet contain information that is not appropriate for Sanford Health use and shall not be knowingly assessed.

It is Sanford Health's policy to abide by all state and federal laws, including copyright laws. Where protected property is used in any authorized context, appropriate attribution will be given.

Students are not to access personal e-mail accounts on Sanford Medical Center Fargo's computers. Access to the Campus of Enrollment's email is permitted. In the radiology department, managers and supervisors are responsible for ensuring the Internet services are used appropriately. The student computer(s) will be monitored by the program director, clinical educators and faculty. Classroom computers are to be used for class assignments only. Casual Internet usage such as personal email, ESPN, Pinterest, or any other website that does not pertain to class is prohibited.

### **Social Networking**

It is important for the student to remember to conduct themselves in a professional manner when participating in social media networks such as Facebook, Instagram, YouTube and Snapchat, etc.

1. Students of the Sanford Medical Center Fargo School of Radiography should conduct themselves on-line in a respectful manner, observing the standards of professional conduct.

2. Students will read, date and sign the “Social Media Policy and Acknowledgement Form” and it will be placed in the student’s permanent file. A copy of this policy may be found on the school website.

### **Radiation Protection Policy**

The program’s policy is to adhere to the hospital, state and federal regulations regarding radiation safety guidelines and policies. Students are to always be supervised, whether it be directly or indirectly, by a quality radiologic technologist. The operating of radiography diagnostic equipment is a vital part of the clinical education experience. Any evidence of exposing any individual for education purposes will result in dismissal from the program. Orientation to radiation protection is provided in the first week of the program and reiterated in each course, with evaluations being done ongoing as to adherence to the ALARA principles.

The following are to be observed by the student:

- Never stand in the primary beam
- Students are not to hold patients during radiography procedures when an immobilization device is the appropriate standard of care.
- Students must not hold image receptors during any radiographic procedure.
- Always wear protective garments when in the room during fluoroscopy or mobile procedures.
- Stand behind protective barriers and close the doors when making an exposure.
- When assisting with mobile radiography, the student is to stand behind the x-ray unit or as far from the primary beam a minimum of 6 feet, and wear the protective apparel when making the exposure.
- Thyroid shielding, eye-protective apparel and gloves, along with the apron with at least 0.5 –mm lead shielding are to be worn as appropriate.
- Mobile and operating room equipment (c-arm) are to always be directly supervised by a registered technologist with the appropriate shielding in place.

Instructions in safe equipment application, use of the appropriate accessories, proper exposure techniques along with patient positioning will be provided and evaluated throughout the twenty-one month program.

Positioning the patient correctly, utilization of proper exposure factors selected based on patient body structure, collimation to limit the beam to only the area of interest and proper instruction to the patient all are practices to ensure the radiation exposure is in keeping with the philosophy of radiation protection. ALARA-as low as reasonably achievable- for the patients, students, staff and others involved in the procedure.

## **FACILITIES AND GENERAL POLICIES**

### **Off-Campus Living**

Students are responsible for finding their own living quarters while attending the School of Radiography. Address and telephone number changes need to be provided to the program director.

### **CLASSROOM RESOURCES**

Each student is provided access to a computer within the classroom.

### **Lounge and Locker Area**

Students have a locker assigned to them the first day of the program located at Broadway Medical Center. Combination locks may be used on the locker for security reasons. The lounge is available to the student during clinical hours. The noise level should be kept low in respect to others who use the lounge area. Lockers at SMCF are not assigned. Students can choose a locker and reset the combination daily.

### **Sanford Medical Center Fargo Food Service**

Food services are available at BMC, SMCF, and South University locations. There is a discount provided to staff members who purchase food services by using their prepaid ID badge. This discount is only offered to Sanford Employees and not students.

### **Alcoholic Beverages**

Alcoholic beverages are not permitted on Sanford Health property. Failure to comply with this policy will result in disciplinary action, which could include dismissal.

### **Smoke Free Environment**

Sanford Health advocates an atmosphere conducive to physical and mental well-being and is a non-smoking facility. No smoking is permitted in any Sanford Health building or property.

### **Radiation Dosimetry for Personnel Monitoring Policy**

Routine monitoring of the radiation environment is an essential part of an effective radiation safety program. The personnel external radiation exposure-monitoring program is designed to measure the radiation environment for those individuals who are occupationally exposed to ionizing radiation.

The personnel monitoring program is managed by the Diagnostic Radiology Physicist (DRP). An introduction to radiation protection will be provided prior to clinical assignments and during orientation an introduction to radiation protection will be presented.

A radiation dosimetry for personnel monitoring policy is established and required for the program. During orientation a monitoring device is given to the student with instructions for usage. This monitor is to be used for occupational dose during clinical hours only. *If the student is employed in the radiology department by Sanford outside of scheduled clinical hours, the student will be issued a separate radiation monitor to wear while they are working.* The dosimeter is to be worn at collar level at all times while in the department. This is to be turned into the program quarterly. An exchange is made at that time, with a new monitor being issued to the student. When notified, the student is to turn the badge in within 5 days. If the monitor is lost, a \$10 fee is charged for replacement costs. If the student is found to be not wearing the radiation monitor in the clinical setting, the clinical educator may send the student home and personal time will be taken. The results of the radiation dosimeter will be available for review quarterly. The student is to review and initial the readings quarterly.

The DRP will review the dosimeter results quarterly. Students should not receive more than 125 millirems/quarter. This is considered to be a threshold dose and if exceeded will trigger a review and investigation by the Radiation Safety Officer. The complete policy is reviewed during orientation.

Following graduation from the program, a final report of past exposure will be issued to the student or sent to the employer upon request.

### **Telephone/Personal Cell Phone Policy**

The student will be introduced to the phone system during the initial months of the program. The student is not to receive personal calls at the clinical setting. Messages may be given to the program director or clinical

educator to be given to the student if the student is in the class or clinical setting. Outgoing calls must be limited also. This is a business phone to use for that purpose only.

Cell phones and personal electronic devices are to be turned off and put away in both the clinical and classroom setting. Text messaging or any form of social media is not allowed while in the clinical and classroom settings. If the student's cell phone is visible or if it rings/vibrates during class or clinical time, the phone will be confiscated and returned to the student at the end of the day. Cell phones may be turned on and checked during break periods. Text messaging is also not allowed while in clinical and classroom settings.

### **Emergency Calls**

If the student must be reached due to an emergency, the student's family may call the program director's office at (701) 234-4949. If there is no one in the program office at that time, the student may be reached in the imaging department. The imaging department numbers are as follows: BMC – (701) 234-5072, SMCF – (701) 417-2067 and SU - (701) 280- 4741.

### **Acceptance of Gifts/Gratuities**

Sanford Medical Center Fargo associates/students will not accept donations of money or other in-kind gifts from patients or vendors. The associate/student is expected to return any gift or gratuity to the patient or vendor and indicate that Sanford Health policy precludes acceptance of the same. If the patient/vendor refuses to take back the gratuity or gift, the associate is to inform the patient/vendor that the gift will be donated to the Sanford Health Foundation in their name and that the Foundation will provide them with appropriate documentation of the charitable gift. The Acceptance of Gift/Gratuities policy will be reviewed during orientation.

### **Parking Information and ID Badges**

Free parking is available to students in specific areas based on availability. Students may park in any area that is designated "employee parking". Parking maps for all Sanford Health campuses are included in orientation binder. A Sanford Health parking permit must be displayed on your vehicle as instructed.

Students may not park in the areas designated for patients and visitors. Security will monitor all of the parking areas. Failure to follow the parking guidelines will result in your vehicle being ticketed and could impact the students' parking privileges at Sanford Health.

Lock your vehicle when unattended. Sanford Medical Center Fargo assumes no responsibility for damage to your vehicle or loss of personal property in your vehicle. The parking permit and the personal photo ID card have to be turned in at the completion of the program.

## **FINANCIAL INFORMATION**

### **Tuition**

Tuition is to be paid to The University of Enrollment in accordance to their policies. Registration policies are to be followed in accordance to the campus schedule. It is up to the student to contact the assigned advisor during the internship to determine compliance with the campus registration and fee payment.

Additionally, tuition for Sanford Medical Center Fargo School of Radiography is \$1500 for the twenty-one-month internship, to be paid by September 30 during the first term. Sanford accounting will be communicating with the

student for the invoice and payment options. Books and developmental tests are provided without charge. There is no refund policy for the \$1500 tuition paid directly to Sanford Health.

The student is responsible for providing his or her own living accommodations and transportation to the clinical site of assignment. Sanford Health provides parking spaces.

### **Financial Aid**

The School of Radiography does not offer financial aid. The student is to contact The University of Enrollment for financial aid and scholarship availability.

### **Refund**

If a student withdraws from the program, a portion of the cost will be refunded based on NDSU's refund policy.

### **Malpractice Liability Insurance**

Malpractice liability insurance is mandatory for all students throughout the educational experience. The School of Radiography does not provide professional liability insurance for students. Liability insurance is provided for the student during the professional internship period by the University of Enrollment. If the student is not enrolled in a university, the student would have to carry the liability insurance personally and submit evidence of coverage to the program prior to the starting date of the program. The student's academic advisor will provide the information regarding the insurance.

## **STUDENT SERVICES**

### **Placement Service**

The School of Radiography does not have a formal placement service for students and graduates. Job skills such as resume preparation, application completion, interview techniques; professional attire, etc. will be included in coursework offered the final term. Position openings will be posted on the student bulletin board when employers contact the program.

Graduates also are encouraged to register with Job Service of North Dakota, a free service of the state. Networking at local and state professional meetings will provide information of the opportunities in the work place. Using the computer web sites provide further job seeking avenues.

### **Occupational Health Services**

Occupational Health Services will provide follow up for every accident or injury to the associate/student on Sanford property. A report is to be completed for every accident or injury NO MATTER HOW MINOR. A report is also required for any exposure of an associate, student, patient or visitor to an environmental condition that may be hazardous to the associate/student's health, such as exposure to a patient with active TB or hepatitis. These reports are to be completed as soon as possible after the incident and forwarded to Occupational Health or Quality Management.

If students are in need of counseling services to resolve personal issues, they are to contact the University of Enrollment for those services.

## CURRICULUM OUTLINE

### Organization

The goal of the School of Radiography is to prepare a fully functioning educated person. The program recognizes the need for a general education base to provide the foundation for the upper level courses. The general education courses include anatomy and physiology, physics, algebra and/or trigonometry and humanity subjects. This background equips students with a broader base of knowledge and skills of thought and expression necessary to foster personal and professional growth as well as enhances the well-being of those who benefit from their services. The program builds the curriculum based on the successful completion of the prerequisite courses at the University of Enrollment providing the degree in Radiologic Science.

JUNIOR YEAR-FALL TERM I  
AUGUST 22-DECEMBER 16, 2022  
17 WEEKS (660 HOURS)

| COURSE NUMBER AND TITLE |   | CREDIT<br>HRS | THEORY<br>HRS | INSTRUCTOR(S) |
|-------------------------|---|---------------|---------------|---------------|
| RS496-301               | ORIENTATION/FUND OF RADIOLOGIC<br>SCIENCE AND HEALTH CARE | 2             | 40            | AG            |
| RS496-313               | POSITIONING I   | 3             | 60            | LC/SSB        |
| RS496-321               | IMAGE ANALYSIS I  | 1             | 20            | LC/SSB        |
| RS496-332               | PRINCIPLES OF EXPOSURE                                    | 3             | 60            | AG            |
| RS496-342               | CLINICAL I  | 3             | 480           | DEPT          |
|                         |   | 12            | 660           |               |

SPRING TERM II  
JANUARY 3—MAY 26, 2023  
21 WEEKS (740 HOURS) 1-week spring break

|           |                   |    |     |         |
|-----------|-------------------|----|-----|---------|
| RS496-322 | RADIATION PHYSICS | 3  | 60  | PHYS/AG |
| RS496-353 | POSITIONING II    | 3  | 60  | LC/SSB  |
| RS496-361 | IMAGE ANALYSIS II | 1  | 20  | LC/SSB  |
| RS496-372 | PATIENT CARE      | 3  | 60  | SSB     |
| RS496-373 | CLINICAL II       | 4  | 540 | DEPT    |
|           |                   | 14 | 740 |         |

SUMMER TERM III  
May 30-AUGUST 4, 2023  
9 WEEKS (480HOURS) 1 week 4<sup>th</sup> of July Break

|            |                                |   |    |             |
|------------|--------------------------------|---|----|-------------|
| RS496-443  | ADVANCED IMAGING EQUIPMENT FLU | 1 | 20 | AG          |
| RS496-453  | ADVANCED IMAGING EQUIPMENT CT  | 1 | 20 | AG          |
| RS496-453a | ADVANCED IMAGING EQUIPMENT MRI | 1 | 20 | AG/MRI DEPT |

|           |  |   |     |      |
|-----------|--|---|-----|------|
| RS496-393 | CLINICAL III Intro to CT, MRI, IR<br>OBS IN CATH LAB, NUCLEAR MEDICINE | 2 | 420 | DEPT |
|           |  | 5 | 480 |      |

SENIOR YEAR  
FALL TERM IV  
AUGUST 21-DECEMBER 15, 2023  
17 WEEKS (680 HOURS)

|           |   |       |         |             |
|-----------|---|-------|---------|-------------|
| RS496-401 | 40 HOUR MAMMO WORKSHOP (OPTIONAL)   | 1     | 20      | Mammo Dept. |
| RS496-403 | DIGITAL IMAGE ACQUISITION AND DISPLAY                                     | 1     | 20      | AG          |
| RS496-411 | TRAUMA  | 1     | 20      | LC/SSB      |
| RS496-413 | CROSS-SECTIONAL ANATOMY   | 3     | 60      | AG          |
| RS496-453 | RADIATION PROTECTION/BIOLOGY  | 3     | 60      | AG          |
| RS496-421 | PEDIATRIC/GERIATRIC   | 1     | 20      | LC/SSB      |
| RS496-431 | ADV. PROCEDURES AND IMAGE ANALYSIS  | 1     | 20      | LC/SSB      |
| RS496-432 | CLINICAL IV<br>CT, MRI, Mammography (optional),<br>IR, General Diagnostic | 3     | 480     | DEPT        |
|           |   | 13/14 | 680/700 |             |

SPRING TERM V  
JANUARY 2-MAY 24, 2024  
21 WEEKS (720 HOURS) 1-week spring break

|           |  |    |     |           |
|-----------|--|----|-----|-----------|
| RS496-441 | PROFESSIONAL DEVELOPMENT   | 1  | 20  | AG        |
| RS496-423 | PATHOPHYSIOLOGY  | 3  | 60  | AG        |
| RS496-463 | REGISTRY REVIEW/CAPSTONE   | 3  | 60  | AG/LC/SSB |
| RS496-455 | CLINICAL V<br>CT, MRI, Mammography (optional),<br>IR, General Diagnostic | 5  | 580 | DEPT      |
|           |  | 12 | 720 |           |

Based on a 40-hour week

CLASSROOM CREDIT HOURS-20 HOURS FOR ONE CREDIT

CLINICAL HOURS:  
0-440 HOURS = 2 CREDITS  
441-500 HOURS = 3 CREDITS  
501-540 HOURS = 4 CREDITS  
541-600HOURS = 5 CREDITS

A total of 2500 clinical hours, 800 classroom hours = 3300 total hrs. in the program for 85 weeks.

**\*\*Classroom hours will be 780 if student opted out of mammography\*\***



### General Education/Prerequisites

The School of Radiography recognizes the need for general education base and has set the admission requirements at a minimum of the completed course work outlined in the campus catalog.

An articulation agreement has been made with the campus of enrollment which states the credits have been completed that satisfy the base knowledge required for entrance to the radiography program. The general education base provides:

- Greater accessibility for career mobility and advanced education.
- Increased parity with other health care disciplines.

General education at the college level places graduates in the job market with a more competitive increased level of education, thus increasing the potential of career success. The program's faculty is responsible for integrating knowledge from the general education courses into professional radiology education and practice. The sequencing for prerequisites is described in the radiology course descriptions.

### Radiology Course Descriptions

- RS496-301      Orientation/Fundamentals of Radiologic Science - 2 credits  
This course will provide the student with an overview of radiography and its role in health care delivery. Student responsibilities will be outlined. Students will be oriented to academic and administrative structure, key departments and personnel, and to the profession as a whole. Basic principles of radiation protection will be introduced.  
*Prerequisites: Admission to School of Radiologic Technology.*
- RS496-313      Positioning I - 3 credits  
Designed to provide the student with the knowledge and skills necessary to perform standard radiographic procedures. Laboratory experience is used to complement the classroom portion of the course.  
*Prerequisites: admission to School of Radiologic Technology.*
- RS496-321      Image Analysis I- 1 credit  
Taught concurrently with Positioning I. Analyzing and critiquing films utilizing an organized and systematic approach will be the focus. Emphasis will be on producing a quality radiograph and knowing what factors to change or correct.  
*Prerequisites: Successful Progress in Positioning I*
- RS496-332      Principles of Exposure - 3 credits  
This course will provide the student with the knowledge of factors that govern and influence the production of the radiographic image on image receptor exposure, contrast, spatial resolution and distortion. The primary exposure factors that influence these qualities will be presented. Grids, will be described. Radiographic technique conversions and charts will be analyzed along with exposure compensation factors. Laboratory materials will be utilized to demonstrate clinical applications of the theoretical principles and concepts.  
*Prerequisite: admission to School of Radiologic Technology.*
- RS496-322      Radiation Physics - 3 credits

To understand how radiation works and the interaction of radiation with matter, this course concentrates on basic information about the physical properties of radiation, how it is produced, how it is measured, and how it is used in the medical environment.

Included is information about electrostatics, electrical safety, magnetism, and transformers.

*Prerequisites: admission to School of Radiologic Technology.*

RS496-342

Clinical I- 3 credits

Introduction to rotations through the radiology rooms of the clinic and hospital setting.

Observation in image processing, reception area, information system, and image management will be included. Specific objectives will be completed in each area. Evaluations of clinical rotations must be completed at the end of the term

*Prerequisites: admission to School of Radiologic Technology.*

RS496-353

Positioning II - 3 credits

A continuation of Positioning I. Skull and sinus, vertebral column and special procedures will be included in this course.

*Prerequisites: Must satisfactorily complete Positioning I and Image Analysis I.*

RS496-361

Image Analysis II - 1 credit

Taught concurrently with Positioning II. A continuation of identifying the standards of radiographic acceptability with the focus on improving radiographic evaluation and positioning skills needed to produce an optimal radiograph.

*Prerequisites: Must satisfactorily complete Positioning I, Image Analysis I and be successfully progressing in Positioning II*

RS496-362

Patient Care - 3 credits

This course will provide the student with the basic concepts of patient care, including consideration for the physical and physiological needs of the patient and family. Routine and emergency patient care procedures will be described, as well as infection control procedures utilizing Standard Precautions. Fundamental concepts of imaging pharmacology and mechanisms of drug actions including: pharmacokinetics, pharmacodynamics, pharmacotherapeutics and drug interactions. Emphasis is on understanding the role of the radiographer in monitoring and assisting with administration of drugs and contrast media used in the radiology department. This course includes phlebotomy techniques, venipuncture, and pharmacology.

*Prerequisites: Admission to School of Radiologic Technology.*

RS496-373

Clinical II- 4 credits

A continuation of objectives in the clinical setting, building on the initial Clinical I, progressing from a passive observation to a more active participation. Specific objectives are given to the student at the beginning of the term. Evaluations of clinical rotations must be completed at the end of the term.

*Prerequisite: Successful completion of Clinical I.*

RS496-392

Clinical III/ Intro to Specialty Areas-Nuclear/PET and Cardiac Cath Lab- 2 credits

Continuation of competency evaluations and more integrated and complex objectives for rotations in the clinical setting. Emphasis on mobile radiography and the surgical setting during

the summer months. Introduction to and observation in the combined week of nuclear/PET, ultrasound. Radiation therapy is introduced. Introduction to CT and MRI prior to rotation provided by the clinical instructions outline the expectations.

*Prerequisite: Completion of Clinical II.*

- RS496-401 40-hour Mammography Workshop (Optional) - 1 credit  
This intensive course will utilize a combination of ASRT CD'S and hands-on positioning workshops taught by a team of experienced mammography instructors. Included on the team are technologists, physicist, and a physician. The course will meet the 40-hour requirements mandated by the MQSA as of April 28, 1999.  
*Prerequisites: Successful completion of Positioning II and Image Analysis II.*
- RS496-403 Digital Image Acquisition and Display - 2 credits  
Provides an understanding of the components, principles and operation of digital imaging systems. As well as discuss factors that can impact the digital image; acquisition, display, archiving and retrieval. Quality assurance for digital systems will be presented.  
*Prerequisite: Completion of Physics.*
- RS496-411 Trauma - 1 credit  
Identification of adjusting standard procedures to accommodate the involved trauma, how to plan and organize a trauma examination in an efficient manner utilizing critical thinking and problem solving skills.  
*Prerequisites: Positioning II, Image Analysis II.*
- RS496-413 Cross-Sectional Anatomy - 3 credits  
Provides images for identification of vital anatomic structures to assist the student in locating and identifying the desired anatomy during actual clinical exams. As technology in diagnostic imaging advances, so does the need to competently recognize and identify cross-sectional anatomy.  
*Prerequisites: Positioning II, Image Analysis II.*
- RS496-421 Pediatric/Geriatric - 1 credit  
Pediatric/Geriatric radiography is described in this course, providing pediatric guidelines for communication at different developmental stages and immobilization techniques. Patient care, radiation protection, and image evaluation are detailed in this course.  
*Prerequisites: Positioning II, Image Analysis II, Patient Care.*
- RS496-423 Pathophysiology - 3 credits  
This course acquaints students with the various disease conditions that may affect the resulting radiographic image. It includes a systematic approach to the diseases involving a specific organ system, organized in a manner that is conducive to progressive learning. Specific changes in technique needed for patients with pathology processes and any special handling of the patient that may be required are included in the course.  
*Prerequisites: Must successfully complete Positioning I and II.*
- RS496-431 Advanced Positioning and Image Analysis - 1 credit

This course provides an in-depth presentation of angiography and selected advance radiographic procedures with an introduction to new imaging modalities. The complexity of radiographs to be evaluated and the level of critique are increased in this course.

*Prerequisites: Must satisfactorily complete Positioning II and Image Analysis II.*

- RS496-432      Clinical IV - 3 credits  
Continuation of completion of competency evaluations and clinical objectives, increasing in complexity and autonomy.  
*Prerequisite: Successful completion of Clinical III.*
- RS496-441      Professional Development-1 credit  
The focus of this course is to provide the student with a comprehensive overview of the concepts driving health care delivery today. It will provide critical insight into managerial perspectives and trends of the imaging world today. Professional societies, licensure and certification will be discussed. Students are introduced to ethical principles as well as case studies of ethical dilemmas in imaging. Interviewing skills, resume preparation, and job seeking opportunities explored with this course Professional worksheet completion (52) are part of the course completion grade. This project is to extend the student's radiology practice experience and provide opportunities for investigation of an aspect of radiology.  
*Prerequisites: Completion of four terms.*
- RS496-443      Advanced Imaging Equipment Fluoroscopy - 1 credit  
Analysis and design of modern x-ray equipment, specifically Digital Fluoroscopy.  
*Prerequisites: Successful completion of Physics.*
- RS496-453      Advanced Imaging Equipment CT – 1 credit  
Ongoing analysis of Computed Tomography presented. This course meets the ARRT structured education requirements for Computed Tomography.  
*Prerequisites: Successful completion of Physics.*
- RS496-453a      Advanced Imaging Equipment MRI - 1 credit  
Ongoing analysis of Magnetic Resonance Imaging presented. This course meets the ARRT structured education requirements for Magnetic Resonance Imaging. 1 credit  
*Prerequisites: Successful completion of Physics.*
- RS496-453      Radiation Protection/Radiation Biology - 3 credits  
Provides an overview of the principles of Radiation Protection. Radiation protection responsibilities of the radiographer for patients, personnel, and the public are presented. Stochastic and non-stochastic effects will be described. Regulatory agencies and agency involvement in radiation protection will be discussed. Radiation biology presents an overview of the principles of the interaction of radiation with the living systems. Details radiation effects on biological molecules and organisms and factors affecting biological response as well as acute and chronic effects of radiation.  
*Prerequisites: Successful completion of Physics.*
- RS496-455      Clinical V-MRI, CT, Mammography (Optional), IR, General Diagnostic - 5 credits

Continuation of diagnostic radiography competency evaluations, performance of minimum core clinical competencies for QA, MRI, CT, and Mammography (Optional). Rotation in Interventional Radiography

*Prerequisites: Successful completion of Clinical IV.*

- RS496-463 Registry Review/Capstone Project - 3 credits  
Registry review for national boards. Standardized tests and review material used for this course. Preparing a professional exhibit for competition in the annual state society conference will be done. This promotes research into up and coming hot topics in radiology as well as participation in professional societies.  
*Prerequisites: Successful completion of all coursework in previous terms.*

## CONTACT INFORMATION

### JRCERT

The JRCERT (Joint Review Committee on Education in Radiologic Technology) STANDARDS are provided and reviewed during the first week of orientation. If the student at any time feels the program is not adhering to the STANDARDS, the program's policy is to follow the due process as explained during orientation, complete with forms and time frame as described. If the student(s) wish to contact the office of JRCERT, they are welcome to visit the web site [www.jrcert.org](http://www.jrcert.org)

The address and phone number are as follows:

JRCERT  
20 North Wacker Drive  
Suite 2850  
Chicago, Illinois 60606-3182  
(312) 704-5304  
Fax: 312-304-5304  
mail@jrcert.org

Any complaint of noncompliance with JRCERT STANDARDS will be made in writing to the Program Director. The Program Director will investigate the allegation and respond to the complainant within five (5) program days of receipt of complaint. If resolution of the complaint has not been achieved, the review committee will be convened within five program days for a discussion and resolution of the complaint.

The purpose of the final meeting is to decide the validity of the complaint and, if necessary, make adjustments to the Program policy that will insure compliance with JRCERT STANDARDS.

Allegations of non-compliance with the JRCERT STANDARDS will be maintained in the Program Director's office, including the complaint and resolution(s).