

BISMARCK MEDICAL CENTER RADIOGRAPHY PROGRAM POLICIES

Sanford Medical Center, Bismarck, N.D., is the sponsoring institution for the program. Students in the program will have rotations within the radiology department at the hospital and its associated areas, and the orthopedics department, located directly across the street. In addition, students will be required to drive to rotations at Sanford South Clinic, Sanford Children's North Clinic and Sanford Northern Sky Clinic in Bismarck and the North Mandan Clinic in Mandan, N.D.

Junior Year

CT
 Diagnostic Radiology
 Emergency Department
 Fluoroscopy
 MRI
 Mobile Radiography
 Nuclear Medicine
 Orthopedics
 Pain Clinic
 Radiology Office
 Sanford North Mandan Clinic
 Sanford Northern Sky Clinic
 Surgery
 Transportation
 Sonography

Senior Year

Cardiac Cath Lab
 CT or MRI
 Diagnostic Radiology
 Emergency Department
 Fluoroscopy
 Interventional Radiology
 Mobile Radiography
 Orthopedics
 Sanford Children's North Clinic
 Sanford North Mandan Clinic
 Sanford Northern Sky Clinic
 Sanford South Clinic
 Surgery
 CT (elective)
 Cath Lab (elective)
 Interventional Radiology (elective)
 MRI (elective)
 Mammography (elective)
 Nuclear Medicine (elective)
 Sonography (elective)

Classroom facilities are located at NDSU Nursing at Sanford Health, 512 N. Seventh St., Bismarck (north of the Seventh & Rosser Clinic). Students have access to the library.

Hours

Assignments are Monday through Friday, between the hours of 6 a.m. and 9 p.m. Students may choose to pick up a Saturday or Sunday elective. During their 22-month internship, students are occasionally assigned to evening rotations that extend until 9 p.m. Students should expect to spend up to 40 hours per week assigned to clinical and didactic experience. Students have classes 2 days each week.

Attendance

The program requires full-time attendance. Students are expected to attend all scheduled classes and clinical rotations unless they are on an approved absence. Students are allowed 80 hours of personal time off while in the program. Any absences in excess of 80 hours must be made up. Students are also provided time off for all major holidays, and are given scheduled break weeks throughout each year.

Dress Code

The student must at all times present a clean, neat, professional appearance while in the clinical setting and LAB. Students are permitted to wear their own clothing when in class. Students must wear either gray scrubs or hospital scrubs during LAB.

- The photo I.D. badge and radiation dosimeter must be worn at all times while in the clinical setting. Students will receive these at the start of the program.
- Hair should be clean, combed and neatly trimmed. Long hair should be pulled back if it will touch the patient when leaning over. Extremes in hair color or style will be addressed on a case-by-case basis.
- Sideburns, mustaches and beards should be neatly trimmed.
- Body art (tattoos, piercing/jewelry) that may be offensive, or if deemed inappropriate at the discretion of the Radiology department Supervisor and/or Program Director, may have to be covered. Examples include, but are not limited to, anything of obscene or sexual nature, facial jewelry, plugs, gauges, or excessive jewelry in the ears.
- Artificial nails or extensions are not to be worn.
- Fingernail polish may be worn as long as it is without cracks and chips, as this promotes bacteria.
- Conservative use of scented lotions, perfumes and colognes is permitted; however, if too strong, they may be banned.
- Scrubs should be clean and free from offensive odor. Students must be conscious of personal hygiene.
- Solid gray scrub pants and top are to be worn in the clinical setting. There should not be any colored trim on the scrubs. A student may wear a white, gray, or black shirt underneath, if they desire. Students may want to purchase a matching solid gray scrub jacket to wear over their scrubs, as it can get chilly in the Radiology department. No blue hospital jackets are allowed to be worn with gray scrubs.
- Scrub pants must reach the ankle. However, for cleanliness reasons, they should not drag on the floor.
- Clean, comfortable shoes are required. Students should try and keep a pair in their locker, and change shoes once you arrive for clinical, in order to keep them clean (especially in the winter months). Socks must be worn at all times.

**We do not have a specific dress code for shoes, as part of the uniform. You may want to purchase a good pair of athletic/tennis shoes. It doesn't matter what color, just make sure that they are comfortable and provide good support, as you will be on your feet a lot.*

Hospital-Issued Scrubs (blue) will be worn for clinical rotations in:

- Surgery (S1, S3, S4, S4)
- Portables (P2)
- Emergency Department (EED, LED)
- Evenings (E)

These blue scrubs will also be worn for any Saturday or Sunday electives that a student picks up. Hospital scrubs will be available to you just before you are on those rotations listed above.

The following are specific requirements regarding hospital scrubs worn in surgery:

- Undershirts are permitted with hospital scrubs ONLY if they do not extend beyond the neckline or sleeves of the scrubs (e.g., tank top). If they are visible, a clean scrub jacket must be worn when entering the surgery room.
- If you are on the Surgery rotation, your scrubs must be covered by a warm-up jacket when not in OR.
- Clean shoes (dedicated for use within the hospital only) should be worn. If not, shoe covers must be worn upon entering surgery. Socks must also be worn.
- Hair/scalp must be confined within a surgical cap upon entering the OR.
- Masks must be worn at all times. Masks are provided for employees/students in the Diagnostic Radiology department.
- Jewelry must be kept to a minimum – a wedding ring, watch, small pierced earrings.
- Maintain short, natural fingernails. Nail polish must be free of chips.
- Scrubs must be left in the hospital laundry upon changing at the end of the day.
- Students are not allowed to wear hospital scrubs out of the building.

Optional

Students may wear designated Sanford clothing, which may be purchased from the Sanford store online on the Intranet. Sanford specialty t-shirts may ONLY be worn during the month of recognition (e.g., heart month, breast month) on Fridays.

Resources

Services provided to students while in the Radiography Program:

- Career planning, prior to graduation
- Employee assistance services/counseling (EAP)
- Sanford Café and Coffee Corner
- Identification badges
- Lockers and locks
- Sanford Health Sciences Library
- Parking
- Radiation dosimeter/monitoring program
- Security escort

Academic Calendar

The program begins the first Monday in August annually, and ends the last Friday in May, 22 months later. Students will have the following scheduled time off:

- Labor Day
- Thanksgiving and Friday
- Week of Christmas
- New Year's Day
- Spring Break
- Memorial Day
- Week of July 4

The Radiography Program runs on (3) 26-week semesters and (1) 17-week semester. Students are required to complete rotational objectives, clinical performance evaluations, and competencies for each semester. Each of the four semesters becomes progressively more challenging than the last, as students gain knowledge and experience in their education.


Resources and Services

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Employee Assistance Program (EAP)

Sanford Health values the health and well-being of its employees and students. Students are able to use the Employee Assistance Program (EAP) from VITAL WorkLife to receive free, confidential counseling and resources. It is available 24 hours a day, 365 days a year, to offer help in regard to professional, physical, relational, financial/legal, spiritual and emotional well-being, in matters involving or including:

- Marital and relationship troubles
 - Depression, stress, and anxiety
 - Parenting and child concerns
 - Drug and alcohol abuse
 - Learning to cope with anger, grief and loss
 - Getting healthy and staying active
 - Legal and financial problems
 - Resolving conflicts
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Pregnancy Policy

The Radiography Program at Sanford Health allows a pregnant student the choice of whether or not to inform program officials of her pregnancy. Federal regulations require that the dose to an embryo/fetus, due to occupational exposure of a declared pregnant woman, does not exceed 0.5 rem during the entire pregnancy. A limit of 0.05 rem/ month of a declared pregnancy is also enforced.

- A. The Radiography Program, in order to comply with these lower dose limits, has adopted the following policy concerning student pregnancy. The purpose of this policy is to:
 1. Allow the pregnant student to make an informed decision regarding voluntary declaration of pregnancy.
 2. Provide for the well-being of the unborn embryo/fetus and reduce the risk of adverse effects.
 3. Provide for the fair treatment of the pregnant student, and maintain the quality of her clinical education.

- B. During orientation, each female student will be made aware of this policy and also the *NRC Guide 8.13, Instructions Concerning Pregnant Women*.

- C. A student who becomes pregnant during enrollment must decide whether or not to declare her pregnancy. Let it be known, **declaration of pregnancy is voluntary**.
 1. A student who elects not to declare the pregnancy is not recognized as pregnant under the terms of this policy.
 2. A student who elects to declare her pregnancy will be subject to the embryo/fetus dose limit set by Federal regulations of the NRC.
 - a. Declaration of pregnancy must be in writing (form is available in the Student Handbook in Radiology cupboard). Verbal information is not official. The student must submit a letter to the Program Director, providing student name, a declaration that she is pregnant, the estimated date of conception (month and year only) and the date of the letter. Documented proof of pregnancy is not required.
 - b. The dose limit is then in effect until the declared pregnant student notifies the Program Director that she has given birth, is no longer pregnant or no longer wishes to be considered pregnant (revokes the declaration through written withdrawal).
 - c. The declared pregnant student must meet with a Sanford physicist. This meeting will be arranged by program faculty.

- D. Options available to the student include:
 1. The student may resign from the Program.
 2. The student may opt to take a one-year leave of absence (LOA).

- a. If the declared pregnant student elects to take a one-year leave of absence, she would return to the program at the same time the following year to complete her studies.
3. The student may continue in the Program without modification or interruption.
 - a. The student would be allowed to take a short LOA (See Leave of Absence Policy) if needed, and return to school with her class. Maximum short LOA is 1 mo.
 - b. A written plan will be developed along with the Program Director. The plan will include make-up course work to be completed before and/or after the period of anticipated delivery. The plan will include make-up for both classroom and clinical objectives.

E. If the declared pregnant student elects to remain in the Program throughout her pregnancy, she must comply with the following guidelines:

1. The declared pregnant student will:
 - a. Meet with the physicist
 - b. Wear a double-sided apron at all times when an apron is required
 - c. Wear a radiation dosimeter at waist level under the lead apron, in addition to the one worn at collar level
 - d. Avoid all unnecessary exposure, and stand behind a protective barrier whenever possible.
2. Adjustments in the clinical schedule of the declared pregnant student are required if dose equivalent limit of 0.5 rem is reached during the pregnancy. The student is reassigned to low exposure clinical rotations.
3. To be eligible for graduation, the declared pregnant student must have completed all required clinical assignments missed, complete didactic classes, and meet all course objectives and competencies before a certificate is awarded. If the student goes over the allotted PTO hours, this time must be made up.
4. This program extension may not exceed more than one year beyond the student's originally scheduled graduation date, or the student will be subject to dismissal.

Radiation Policy

1. During orientation, a basic introductory to radiation protection is provided to ensure that all students are made aware of protective measures and the use and storage of radiation protection garments. Radiation protection is reiterated in many courses.
2. Students must wear their personnel dosimeter at all times while in the clinical setting, including LAB. The dosimeter "monitors" the radiation received; it does not protect you from radiation.

*Any student who does not wear their dosimeter in the clinical setting will be deducted 1% from their Clinical Grade for the semester.

3. Students must stand behind lead glass of the control booth whenever patient exposures are made, except fluoroscopy (including C-arm).
4. **Students are not allowed to hold patients or IRs during any radiographic procedures.**
5. Students are required to wear a lead apron, thyroid collar, and lead glasses during all fluoroscopy procedures. Whenever a lead apron is worn, the student's dosimeter should be placed outside the apron, at collar level.
6. Students are required to purchase a thyroid collar for themselves at a cost of approximately \$69. Program faculty will order it at the start of the program.
7. Students are required to exchange their dosimeter every 3 months with the Clinical Coordinator when the new batch arrives. Any student who loses their dosimeter must speak to one of the faculty in order to get a new one.
8. When the new radiation dosimetry report arrives in the Radiography Program, it is brought to the classroom for students to view and initial. Students should review the report for their monthly and cumulative doses. This report will remain on the bulletin board in the classroom until the next one arrives.
9. If a student dose reaches 75 mrem for a quarter, the Program Director will contact the student to discuss possible reasons for the high dose, and counsel them if need be on radiation protection measures to be applied. Any student who receives radiation in excess of 125 mrem/qtr. (deep dose) will be notified by the Radiation Safety Officer, and may be reassigned to different rotation.
10. Students must not wear their radiation dosimeter if they are having any diagnostic medical or dental radiography of themselves. The dosimeters are for monitoring occupational exposures only.
11. Upon completion of the program, students should make sure that their future employer receives their radiation history (exposure amount), since radiation is cumulative. Students will receive a copy of their final dosimetry report from the Clinical Coordinator at the address provided to the program at their Final Conference.
12. Students must never make an exposure of anyone without a physician's order. Exposures are NOT to be made of radiographers, other students, family members, or friends.
13. For the protection of the patient, students must follow the Supervision and Repeat Policy regarding radiation exposures. A registered technologist will be available for students' supervision during LAB.

14. Students must always follow the 3 Cardinal Rules of Radiation Protection, along with the ALARA philosophy (as low as reasonably achievable) to protect patients, others, and themselves when using ionizing radiation:
- Time – reduce the amount of time spent in the vicinity of the radiation source while it is operating
 - Distance – increase the distance between the radiation source and the individual to be protected
 - Shielding – interpose a shielding material, which will attenuate the radiation from the source

MRI Safety

- August:
 - Introductory information (MRI basics and safety education) presented during orientation, at the start of the program (1st semester), prior to any clinical rotations, by the Magnetic Resonance Safety Officer (MRSO).
 - Junior students complete the screening form during orientation. Forms will be reviewed by the MRSO at that time.
 - If a student is not cleared, they will be rescheduled to a different rotation.
- January:
 - The MRI lead technologist comes to the classroom (approximately one month prior to any rotations) to provide an MRI presentation to the Junior students.
 - The Juniors will complete the screening form again. The forms will be reviewed initially by the lead technologist. If a student answers “Yes” to any statement, it will be reviewed by the MRSO. If concerns are raised for students’ safety, the MRSO will meet with the student.
 - If a student is not cleared, they will be rescheduled to a different rotation.
- February -July:
 - On the first day of a Junior student’s rotation, the MRI staff will verbally screen them before allowing them to enter Zones 3 and 4.
- September:
 - Annual safety information is presented to Senior students by the MRSO.
 - Seniors complete the screening form. Forms will be reviewed by the MRSO at that time.
 - If a student is not cleared, they will be rescheduled to a different rotation.

*Students must inform the program at any time if there are changes to their responses on the MRI screening form, so that they may be reassigned to another rotation, if necessary.

Student Supervision and Repeat Policy

Policy and procedure regarding the supervision of radiography students must be strictly adhered to. As directed by the JRCERT, the student to radiographer ratio must be 1:1. There can only be one student in the room for each technologist. The terms of supervision are defined as follows:

Direct supervision means that a registered radiographer:

1. Reviews the control sheet in relation to the student's achievement
2. Evaluates the condition of the patient in relation to the student's knowledge
3. Be physically present during the entire exam
4. Review and approve the procedure and/or image

All students must be directly supervised until they achieve competency for an exam.

Indirect Supervision Indirect supervision means that a registered radiographer is immediately available to assist students, regardless of the level of student achievement. "Immediately available" is interpreted as the physical presence of a qualified radiographer adjacent to the room or location where the procedure is being performed.

1. A student may be indirectly supervised after successfully completing a competency for a procedure. The radiographer must be informed when a student will be performing an exam by themselves.
2. The radiographer must be "immediately available" (outside the door) for assistance.
3. The radiographer must approve all images before the patient is let go.
4. Telephones and beepers are not considered immediately available.
5. All images must always be approved upon completion of any procedure by a student.

Students must have DIRECT SUPERVISION:

1. During surgery, and all mobile procedures, including mobile fluoroscopy (Pain Clinic included), regardless of competency level.
2. When performing ED patients, due to possible sudden changes in the patient's condition.

Repeat Radiographs

In support of professional responsibility for provision of quality patient care and radiation protection, a qualified radiographer **must be physically present during all repeat exposures**, and must approve the student's procedure (positioning, technique) prior to re-exposure, *regardless of the student's level of competency*.

- Any student who does not follow these policies is subject to dismissal from the Program.

Graduation Requirements

A radiography student is eligible for graduation only after meeting the following criteria:

1. Completion of all didactic courses with a minimum of 78% (C). See Grading and Evaluation described in this handbook.
2. Completion of all Clinical Grades (and requirements) with a 78% (C) or higher. Clinical requirements include:
 - a) Objective Checklists
 - b) Competency Evaluations
 - c) Clinical Performance Evaluations
3. Completion of all LAB courses with a 90% (C) or higher. (See LAB Grading Scale)
4. Completion of all clinical hours, including any make-up hours.
5. Training in CPR, vital signs, venipuncture, oxygen administration, sterile and aseptic technique, and transferring patients.
6. Payment of all tuition and fees

The Program Director will NOT verify completion of the program/college with the ARRT until the student has paid all fees. This includes final tuition to the student's college of enrollment.

Program completion date is always the last Friday in May.

- Upon completion of the Program, students will receive a **certificate** from the Sanford Radiography Program.
- Students will be granted their degree in Radiologic Technology from the University to which they are enrolled and paying tuition accordingly.
- Sanford Radiography Program will send students' final transcripts to their University, upon successful completion of the program.

There is no early graduation from the program.

Job Placement

The Radiography Program does not guarantee job placement upon completion of the Program. However, students will be made aware of job offers that are sent to the Program office and/or instructors. Senior students are offered assistance with resume' writing and interviewing skills.