## Mission, Philosophy and Goals

## **University Mission**

As a public comprehensive university located in a major metropolitan area, Northern Kentucky University delivers innovative, student-centered education and engages in impactful scholarly and creative endeavors, all of which empower our graduates to have fulfilling careers and meaningful lives, while contributing to the economic, civic, and social vitality of the region.

#### **Program Mission**

The mission of the Radiologic Science Program at Northern Kentucky University is to prepare students for entry into the profession of diagnostic radiography. The program provides students with the opportunity to acquire knowledge and skills necessary to achieve clinical competence, which includes the safe use of ionizing radiation and quality patient care. The program is committed to the concept of life-long learning and promotes standards of professionalism that will serve radiographers throughout their professional careers.

#### **Program Philosophy**

The Radiologic Science faculty believes that any educational curriculum in higher education should include coursework that will help students acquire knowledge, skills, and professional behaviors. This should contribute to an understanding of self and the world, promote effectiveness in meeting civic, occupational, and personal challenges, enhance appreciation of the range and depth of human knowledge and experience, and encourage the desire and ability to continue learning. The program faculty are dedicated to the development of excellence in patient care and seek to promote within students an empathetic awareness of patients and their needs. The faculty believes that sound moral and ethical judgment is a requirement for becoming a professional radiographer.

#### **Program Goals**

The Radiologic Science Program of Northern Kentucky University has identified goals, which are referenced to and consistent with the University and College mission statements.

1. The students will be clinically competent.

Student Learning Outcomes:

- A. Students will be able to apply radiation protection principles.
- B. Students will be able to competently perform routine radiographic procedures.
- C. Students will determine appropriate technical factors.
- 2. Students will communicate effectively.

Student Learning Outcomes:

- A. Students will demonstrate effective written and oral communication skills.
- B. Students will identify best practices for communicating with diverse populations.
- 3. Students will demonstrate critical thinking and problem-solving skills.

Student Learning Outcomes:

- A. Students will adjust radiographic techniques for non-routine situations.
- B. Students will modify positioning for non-routine/trauma exams.
- C. Students will demonstrate improvement in problem-solving skills over the duration of the program.
- 4. Students will demonstrate professionalism.

Student Learning Outcomes:

- A. Students will demonstrate high standards of ethical and professional behavior in the clinical setting.
- B. Students will write a plan for professional growth and development, to include career goals and identification of requirements for ARRT certification.

These goals support the University's mission to offer preparatory programs in career and selected professional fields, such as Radiologic Science. Through related program activities and through graduates of the program, the community is served by having access to professionally capable and skilled allied healthcare workers.

#### **Program Description**

The Bachelor of Science in Radiologic Science Program is a 34-month course of study that provides both educational and technical preparation in radiography. Graduates are competent in all routine

radiographic and fluoroscopic diagnostic procedures. Education for the radiography student is an integrated plan of classroom, laboratory, and clinical education.

#### **Program Accreditation and Noncompliance Statement**

The Radiologic Science Program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). The *JRCERT Standards for an Accredited Educational Program in Radiologic Technology* provide specific objectives that must be met by the program, and can be viewed at <a href="http://www.jrcert.org/programs-faculty/jrcert-standards/">http://www.jrcert.org/programs-faculty/jrcert-standards/</a> (the first link – Radiography Standards).

 Allegations of non-compliance with JRCERT Standards should be directed to the JRCERT, 20 N. Wacker Dr., Suite 900, Chicago, IL 60606-2901, (312) 704-5300.

#### **Program Effectiveness**

Program effectiveness is assessed through credentialing examination pass rate, job placement rate, and program completion rate on an annual basis. This data is available on the website (<a href="http://healthprofessions.nku.edu/departments/alliedhealth/programs/radiologicscience/program-effectiveness-data.html">http://healthprofessions.nku.edu/departments/alliedhealth/programs/radiologicscience/program-effectiveness-data.html</a>) and can also be found on the JRCERT's website (<a href="https://www.jrcert.org">www.jrcert.org</a>).

#### **Classroom Instruction**

The classroom component of the program provides a sound foundation of theory and basic knowledge on which clinical skills will be built. Topics covered by courses include study in: patient care, human structure and function, radiographic positioning, radiation biology and protection, principles and techniques of diagnostic imaging, radiation physics, equipment operation, pathology, image evaluation, health care management, research, sectional anatomy and advanced imaging.

## **Laboratory Instruction**

The development of clinical skills is initiated in the laboratory. Students are evaluated to be sure they understand theory and procedure before using those skills in a clinical situation. In that way, the laboratory bridges the classroom and clinical components.

#### **Clinical Instruction**

The clinical phase of the program provides an environment for supervised, competency-based clinical education and experience. It assures that students who successfully complete the program will be able to perform radiographic examinations according to accepted professional standards. The clinical phase is integrated with University coursework through clinical classes taught weekly at the affiliate hospitals by NKU faculty.

The program is affiliated with the following educational centers: Cincinnati Children's Hospital Medical Center

Commonwealth Orthopaedic Centers

Dearborn County Hospital

Mercy Health - The Jewish Hospital

Mercy Health - Clermont Hospital

Mercy Health - Anderson Hospital

St. Elizabeth Healthcare – Covington

St. Elizabeth Healthcare – Edgewood

St. Elizabeth Healthcare – Grant County

St. Elizabeth Healthcare – Ft. Thomas

St. Elizabeth Healthcare – Florence

St. Elizabeth Imaging – Hebron

St. Elizabeth Physicians - Florence

St. Elizabeth Physicians – Newport\Ft. Thomas

Wellington Orthopaedic & Sports Medicine

During the program, students are assigned to at least two hospitals, one orthopaedic clinic, and one pediatric facility.

# **Curriculum Requirements**

To complete the Bachelor of Science in Radiologic Science Program, students must complete the following:

- 84 credit hrs of required program courses
  - o 20 credit hours of clinical practica
  - o 64 credit hours of didactic and laboratory courses
- 38 credit hours of Foundation of Knowledge (general education) courses.

Successful completion of all program requirements satisfies University requirements for a Bachelor of Science Degree.

**GENERAL POLICIES AND PROCEDURES** 

## 1.0 Academic Advising

- 1.1 Each student must declare radiologic science (RADB) as the major by the end of the RAD 200 course. Students may be withdrawn from RAD courses if the change of major is not completed.
- 1.2 Each radiologic science student will be advised by a program faculty member who will have regularly scheduled and posted office hours. The student should schedule at least one advising appointment per semester to discuss overall program performance, course scheduling, and career counseling.
- 1.3 A student who is experiencing academic difficulty in any course should discuss her/his performance with the course professor. If necessary, the student may be referred to the Learning Assistance Programs office for academic tutoring.
- 1.4 A student who has a classroom or course-related complaint should first discuss the issue with the professor of that course. If the difficulty cannot be resolved, the student should next seek assistance from the program director, followed by the department chair and dean.
- 1.5 The faculty recognizes that many students must work in addition to attending school.
  A maximum of 15 hours workload is recommended due to the heavy course load.
  Course and clinical schedules will not be altered due to student employment schedules.
- 1.6 Students will not be scheduled for more than 40 hours per week in classroom, laboratory, and clinical activities. Clinical shift hours may vary during 1<sup>st</sup> and 2<sup>nd</sup> shift clinical experiences. Classroom hours will vary per semester, which may include class times beginning at 8am with afternoon classes ending at 5pm.
- 1.7 If a student has completed some or all of the program's general academic requirements prior to admission to the program, he/she may carry fewer than 12 hours per semester while in the program. Under these circumstances, the student

will be considered full-time by the <u>program</u> even though the University defines a full-time student as one who is carrying 12 or more hours. Students receiving financial aid may be required to carry at least 12 semester hours; students should contact the Office of Student Financial Assistance for clarification.

#### 2.0 Academic Responsibilities and Standards

## 2.1 <u>Textbooks</u>

- 2.11 Each student is responsible for purchasing the required textbooks before the second meeting of the class.
- 2.12 Because the same textbook may be used again in later courses, it is strongly recommended that, before selling books, a student consult the Radiologic Science faculty who will be teaching future courses.

## 2.2 <u>Assignments</u>

- 2.21 Each student is responsible for completing all reading, written, and oral assignments made by the faculty.
- 2.22 If a student is absent from class for any reason, he or she is still responsible for the material discussed and assigned in class.
- 2.23 Extension on due dates for assigned material may be granted at the instructor's discretion.

## 2.3 <u>Classroom Etiquette</u>

2.31 Each student is responsible for learning the content of any course in which he/she is enrolled and for respecting the rights of fellow students in the classroom. (See "Code of Student Rights and Responsibilities" http://scra.nku.edu/Infostudents/Infostudents.html). The sharing of ideas and clinical experiences by students is encouraged. The classroom is a place where students must feel comfortable participating in class discussions and other course activities without fear of ridicule. Students

- are expected to demonstrate appropriate professional behavior by actively listening to peers and faculty, voicing ideas in a respectful manner, and showing consideration for other's ideas and opinions.
- 2.32 The instructor has the right to ask any disruptive student to leave the classroom.
- 2.33 Sexual Harassment in the clinical setting should be reported to the course instructor. The University's Sexual Harassment Policy can also be found in the "Code of Students Rights and Responsibilities."

#### 2.4 Cell Phone Use / "Personal" Electronic Device Policy

The program has in place a policy for the use of cell phone/electronic devices by the student radiographer that applies to both academic and clinical settings. This policy may be superseded by policies established by the particular clinical facilities at which the student is scheduled for clinical rotations. The policy also applies to the use of cell phones/electronic devices for the taking of photographs at the clinical setting.

2.41 Ringing/vibrating cell phones are a sign of disrespect as they distract other students and the instructor in the classroom and lab. The use of any electronic devices (such as cellular phones, downloadable or text messaging devices, iPads, iPods and MP3 players) is prohibited in the classroom and lab. Students using these devices will be asked to leave the academic setting immediately and the occurrence will be counted as an absence in the course. The student's course grade will be affected as indicated in the specific course syllabus attendance policy. Cell phones may not be used as a calculator during an exam. If it is necessary that a student be reached by phone, the Department of Allied Health office phone number (859-572-5476) should be used.

- 2.42 At no time should students wear, carry or use cell phones or other electronic devices during their hours of clinical practicum, including clinical class held by NKU faculty. Their use during work hours and in work areas is prohibited as it is unprofessional and a potential cause of HIPAA violations. Cell phones/electronic devices cannot be carried in work areas and can only be used before the student clocks in, after he/she clocks out or during lunch. The following penalty applies if a student is caught having a cell phone/electronic device during work time and in a work area at any time during the program:
  - 1st offense immediate suspension from the clinical site by faculty, clinical instructors or department management and written warning in the form of a Corrective Action Plan. The suspension will be counted as a full day absence and will affect the clinical grade and make-up time according to the course syllabus. The Corrective Action Plan will lower the course grade by a full letter grade. If NKU faculty is notified of a student's cell phone use after the fact, the student will be notified by the clinical coordinator and the suspension will take place on the next regularly scheduled clinical day.
  - 2<sup>nd</sup> offense dismissal from the program.
- 2.43 The student may not make or receive personal phone calls in the radiology department except in the case of emergencies. The student should provide the radiology department phone number to families for use in emergency situations.

## 2.5 Social Media

The radiologic science program urges all students to be conscientious and

careful when using social media (Facebook, Twitter, Instagram, LinkedIn, personal blogs, personal web sites, etc.). Inappropriate use can diminish personal reputations as well as the reputation of the university, program and program affiliates. Students must use good judgment on what material they permit to become public. The following rules apply to use of social media as a student in the radiologic science program:

- Students must be respectful in all social networking sites referencing the NKU radiologic science program and any of its clinical affiliates.
- Students may not discuss any patient information or post photographs containing patient medical images or other patient-related information.
- 3. Students must not use social networking sites at any time to harass, bully or intimidate other students. Behaviors that could constitute bullying or harassment include, but are not limited to, comments that are derogatory with respect to race, religion, gender, sexual orientation, color or disability; sexually suggestive, humiliating or demeaning comments; threats to stalk, haze or physically injure another student; or threats related to academic and/or clinical performance.
- 4. Students may not take or post any pictures from clinical site work areas; students must make sure that any pictures from non-work areas do not include any patients, visitors, or other unidentified individuals. The clinical facility must not be identified by name or logo.
- Students must not post pictures of or information about other students,
   faculty, or clinical staff without first obtaining permission from that person.
- 6. When a picture of a student in clinical uniform is posted, the student becomes a representative of the radiologic science program and respectful, professional postings are expected.

This policy may be superseded by policies established by the particular clinical facilities at which the student is scheduled for clinical rotations. Violation of this policy will result in disciplinary action.

## 2.6 Course Syllabus

- 2.61 Within the first week of each term, each professor is required to provide students in the course with a course syllabus.
- 2.62 The syllabus will contain a description of the course, the goals and/or objectives of the course, a method of evaluating and grading students, and the nature of written or oral assignments.
- 2.63 Each student in the course is responsible for meeting the requirements stated in the syllabus.

## 2.7 <u>Evaluations and Grading</u>

2.71 The American Registry of Radiologic Technologists (ARRT) has established a minimum passing score of 75%. Because program faculty want students to exceed the minimum, standards of grading that are consistent with the grading systems of other radiologic science programs have been developed. The grading scale used for final course grades is:

Letter Grade	Percentage Grade	Grade Point
Α	100 - 95	4.00
A-	94 - 93	3.67
B+	92 - 90	3.33
В	89 - 87	3.00
B-	86 - 85	2.67
C+	84 - 82	2.33
С	81 - 77	2.00
C-	76 - 75	1.67
D+	74 - 72	1.33
D	71 - 70	1.00
F	Less than 70	0

2.72 Each professor is responsible for determining academic achievement of students in the course.

- 2.73 Standards for evaluation and grading will be stated in the course syllabus.
- 2.74 Each course instructor will determine the policies and procedure for administration of quizzes, tests, and exams, and the course of action for missed quizzes, tests, and exams. Policy and procedure for review of quizzes, tests, and exams will likewise be determined by the faculty teaching the course. Students are to refer to the course syllabus for these policies and procedures. During exams, faculty may request that all book bags, purses, hats, coats, cell phones, other apparel and equipment considered non-essential be placed in a designated area of the classroom.

## 2.8 Standards of Academic Achievement

- 2.81 Each student must pass <u>all</u> courses required for the program, including clinical independent studies, with a <u>C</u> or higher to remain in the program. Any student who receives less than a <u>C</u> in these courses will be dismissed from the program.
  - \* A grade of C- or less in a RAD course results in program dismissal. Policy for Dismissal (See policy in section 11) and Readmission applies at that point.
  - \* A grade of C- or less in a non-RAD required course would result in academic probation within the program and the course must be repeated. A second grade of C- or less in a non-RAD required course would result in program dismissal.
- 2.82 Each student must pass BIO 209 Human Anatomy and Physiology II, and BIO 209L, with a grade of C or better as a prerequisite for RAD 350.
- 2.83 A student receiving any unsatisfactory clinical evaluations (<85%) or notice of poor clinical performance will be counseled by one of the NKU clinical faculty. If necessary, a corrective action plan may be completed. (See 8.0)

## 2.9 Standards of Professional Integrity

2.91 The maintenance of academic standards and integrity include the obligation not to lie, cheat or plagiarize. A student who uses dishonest or deceitful means to obtain a grade is guilty of cheating; a student who submits another's work as his or her own without adequate attribution is guilty of plagiarism. Sanctions for cheating and plagiarism, as well as appeal rights and procedures are outlined in the "Code of Student Rights and Responsibilities" on the NKU website.

2.92 The College of Health Professions expects all of its members, including faculty, staff, and students, to exhibit and practice civil behavior (see Civility Policy - Appendix A).

#### 3.0 Expenses

In addition to the normal University tuition, fees, and book costs, a student in the Radiologic Science Program will incur the following expenses.

<u>Uniforms:</u> Each student is responsible for furnishing his/her own uniforms, including hosiery and shoes. (See 24.0)

## <u>Immunization & Testing:</u>

Lead Markers:

Each student is responsible for the cost of all required immunizations. If a clinical site requires a drug test, the student is responsible for the cost of such test.

<u>Transportation:</u> Each student is responsible for furnishing transportation to his/her assigned hospital.

Insurance: Each student is required to purchase professional liability insurance, which is included as a lab fee for the summer courses. In addition, students must provide proof of health insurance.

Each student will be required to purchase lead markers for use in lab and clinical courses. Order forms will be distributed in RAD 200 and markers must be received by August 1st. Students will be responsible for replacement of lost markers.

<u>Course Fees:</u> Each clinical practicum course will have a fee assessed to cover the

cost of radiation dosimetry service. In addition, some University courses assess a laboratory fee to cover the costs of materials used.

These fees will be assessed with tuition.

## Criminal Background Check:

Each student may be required to pay for a criminal background check in order to progress clinically through the program.

Wristwatch: The student may wish to purchase a wristwatch with a second hand to be used for patient assessment.

Each student is required to be certified in adult, child, and infant CPR. Documentation of certification must be provided. Online CPR certification programs are only acceptable with documentation of hands-on skills assessment.

A student who completes the program is eligible to purchase and wear the program pin, signifying graduation from NKU's Radiologic Science Program. Pins may be purchased in the spring semester of the last year and are presented at the Radiologic Science Pinning Ceremony in May.

Students are responsible for providing their own course supplies, including flash drives, DVDs, etc.

Students will be provided with a radiation dosimeter in RAD 200. The cost for dosimetry service is included as course fees for RAD clinical practica. If the dosimeter is lost or damaged, the student assumes responsibility for the cost of replacement, which can be as much as \$75 per incident.

An NKU photo ID badge will be purchased at the All-Card office on campus. Lanyards may be purchased at the campus bookstore.

CPR Training:

Pin:

Course Supplies:

<u>Dosimeter:</u>

Photo ID badge:

## 4.0 Health

#### 4.1 Immunization and Screening for Communicable Diseases

- 4.11 Students must provide documentation of immunity to and/or immunizations according to CDC guidelines for healthcare personnel. The following immunizations must be documented prior to the start of the clinical practicum:
  - 1) Rubella
  - 2) Rubeola (measles)
  - 3) Mumps
  - 4) Varicella Zoster (chickenpox)
  - 5) Police
  - 6) Hepatitis B (series of 3 vaccine injections)
  - 7) Tdap
  - 8) Influenza

Students failing to submit documentation as required will be prohibited from starting or continuing their clinical experience.

- 4.12 To comply with hospital requirements, a two-step test for tuberculosis (TB) must be done annually. The student is responsible for submitting documentation of annual two-step TB screening. The two-step TB test consists of two injections one to three weeks apart. A student enrolled at the University can receive the two-step TB test for a small fee through Health, Counseling & Student Wellness (UC 440), (859) 572-5650. Failure to submit documentation as required will result in clinical suspension.
- 4.13 The student is responsible for notifying the Office of Disability Programs and Services (SU 303), (859) 572-5401, of any limiting disability or condition requiring accommodations.

## 4.2 Technical Abilities

Radiography involves direct patient care and requires the application of knowledge

in the skillful performance of technical functions. Programmatic guidelines demand the following abilities:

- Sufficient visual acuity to assess skin tone changes detectable in cyanotic or flushed skin, detect color shades/tones such as shades of gray seen on radiographs, evaluate radiographs for quality, and read printed words in textbooks and on medical equipment.
- Sufficient hearing to communicate with patients and other members of the health care team, monitor patients via audio monitors, hear background sounds during equipment operations, and respond to the audible sounds of the equipment.
- 3) Sufficient gross and fine motor coordination to manipulate equipment and accessories, lift a minimum of 30 pounds, and to stoop, bend or promptly assist patients who become unstable.
- 4) Satisfactory physical strength and endurance to move immobile patients to or from a stretcher or wheelchair to the x-ray table, work with arms extended overhead (approximately 80 inches from the floor), carry 20-25 pounds while walking, and stand in place for long periods of time.
- Satisfactory verbal, reading and writing skills to explain radiologic procedures and direct patients during those procedures and communicate in English for effective and prompt interaction with patients, fellow students, faculty, and hospital personnel.
- Satisfactory intellectual and emotional functions to ensure patient safety and exercise independent judgment and discretion in the performance of assigned responsibilities, measure, calculate, reason, and evaluate as required for direct patient care, and handle stressful situations related to procedural standards and patient care situations.

7) Students with a disability should declare the disability and provide verification to the Office of Disability Programs and Services (SU 303), (859) 572-5401, so reasonable accommodations can be made.

## 4.3 **Health Insurance**

Each student is required to carry personal health insurance. Health insurance information on an independent health plan is available through the NKU Health, Counseling and Student Wellness office (UC 440), (859) 572-5650. Neither the University nor affiliated medical facilities provide such coverage for students. (See 26.0) Annual documentation of insurance coverage is required.

## 4.4 **Temporary Disability**

- If a student incurs a temporary disability, it is the student's responsibility to report the disability to the director of the Radiologic Science Program.

  Temporary disability is defined as pregnancy, broken bones, back injuries, communicable diseases or any other injury or condition that could temporarily prevent the student from safely participating in lab or clinical coursework or could endanger the patients or other members of the program.

  Documentation from the student's physician may be necessary in the case of a temporary disability.
- 4.42 If a student incurs a temporary disability, the director will work with program faculty to make every reasonable effort to accommodate the student. For disabilities of short duration, the director and the student may attempt to reschedule the education missed. For disabilities of longer duration, where rescheduling is not possible, the student may need to withdraw from the program and re-enter the following year.
- 4.43 Any student returning to classes following a temporary disability must submit to the program director a Disability Waiver Form (available in program office)

completed and signed by the student's physician. This form must be received before the student is permitted to resume regular coursework.

## 4.5 **Pregnancy**

Because radiation can increase the likelihood of biological effects in the fetus, the Radiologic Science Program has policies related to the declared pregnant student.

- 4.51 <u>Declared Pregnancy</u>. Radiation protection regulations allow a pregnant woman to decide whether she wants to formally declare her pregnancy to her employer or, in this case, the program director. It is the pregnant student's choice whether to declare the pregnancy. Declaration of pregnancy must be in writing and must include the student's name, declaration that she is pregnant, the estimated date of conception (month and year only), and the date the letter is given to the program director. A sample form letter is available in the Radiologic Science Program office for convenience; a pregnant student may also write her own letter, as long as it includes the above information. It is the student's responsibility to share this information with course faculty and clinical instructors, if she so chooses.
- 4.52 <u>Dose Limits and Monitoring.</u> Any student who states in writing that she is pregnant will be provided with a second dosimeter to be worn at the waist level. A second dosimeter will not be given to any student who may be pregnant but has not declared the pregnancy in writing. To more accurately estimate embryo/fetal dose, the second dosimeter must be worn under lead protective apparel. Although the NCRP recommendation limits the pregnant radiation worker to 500 mR for the embryo/fetus, the Radiologic Science Program limits the dose to 250 mR because students are not in radiation areas on a full time basis.
- 4.53 Counseling for Informed Decision. The declared pregnant student is

encouraged to schedule an appointment with the program director to discuss biological risks associated with exposure to radiation, the precautions and procedures to minimize exposure, the regulations she is expected to observe, and cumulative radiation records. If the established radiation safety procedures are practiced, it is highly unlikely that a student radiographer will exceed 250 mR. Based on past radiation monitoring reports, students' dosimeter readings are normally well below this limit on an annual basis when they are scheduled in all areas. The program director may make recommendations to the student and clinical coordinator regarding clinical education assignments to minimize fetal dose, the student may choose to continue the program without modifications.

A.54 Revoking the Declaration of Pregnancy. If a student has declared her pregnancy in writing but is no longer pregnant, she should revoke the declaration in writing to avoid confusion. If a pregnant student miscarries and becomes pregnant again before revoking the original declaration of pregnancy, she should submit a new declaration of pregnancy with the new date of conception. The lower dose limit will be in effect until the program director knows she has given birth, she informs the director in writing that she is no longer pregnant, or she informs the director that she no longer wishes to be considered pregnant.

## 5.0 Exposure to Infectious Disease Policy

Any student, through the course of clinical education, who is contaminated through air, blood or other body fluids that are potentially infectious must:

- 1. Follow the hospital's procedure for reporting the incident.
- 2. Notify the clinical instructor at the site.

- 3. Notify the program director and/or clinical coordinator.
- 4. Follow prescribed treatment at his/her own cost.

## 6.0 Student Records

The registrar's office maintains records of all courses attempted and/or completed by all students. The following records are kept by the program and are available for student review:

- 1. Immunization record
- 2. Radiation monitoring record
- Attendance and clinical rotation records
- 4. Clinical competency records

Records may not be removed from the program office. Confidentiality of student records both on campus and at the clinical sites is maintained according to the federal Family Educational Rights & Privacy Act of 1974 (FERPA) through the use of locked file cabinets or other locked boxes.

#### 6.1 Right to Inspect Records

Under FERPA, students have the right to inspect and review any and all official records, files and data pertaining to them (with specific exceptions, a list of which may be obtained from the Registrar).

Students who want to challenge the contents of their records should contact the Dean of Students, or follow the procedure outlined in the "Code of Student Rights and Responsibilities" on the Dean of Students website.

## 7.0 Student Counseling

Several types of counseling/assistance are available to Radiologic Science students.

## 7.1 <u>Academic Counseling</u>

The purpose of academic counseling is to promote, assist, and maintain superior student performance. During a scheduled advising appointment, the academic advisor will review the student's performance and behavior and make appropriate recommendations. Feedback given in counseling may be used to identify areas of strength and weakness in student performance or behavior.

## 7.2 <u>Behavior Record</u>

The Behavior Record Form (Appendix B) is used to document positive or negative student performance. The form may be used by clinical personnel, faculty, or other students to record incidents that may be either positive or negative. All Behavior Record Forms will be kept in the student's file. Positive records will be used in writing letters of reference. Negative records may be used to substantiate behavior before taking disciplinary action.

#### 7.3 Student Services

There are several offices on campus that provide student services, such as the Offices of Health, Counseling & Student Wellness (UC 440), Disability Programs and Services (SU 303), and Career Services (UC 225). The staff in these offices seek to help students develop appropriate academic, career, and life goals, and to assist them in maximizing their academic, social and emotional potential. Programs offered include: health services, special programs, counseling and testing services, career services and peer support groups. Other university and student services are identified in the *NKU Undergraduate Catalog*.

#### 8.0 Disciplinary Action

Students in the program are expected to adhere to program and hospital policies. Failure to adhere to such policies will result in the following disciplinary actions:

- 1. Verbal reprimand/student conference
- Faculty/student conference, documented by a written reprimand in the form of a Corrective Action Plan (see Appendix C).
- Dismissal from the program following failure to complete Corrective Action Plan.
   It should be noted that some situations may be serious enough to require immediate stern disciplinary measures, resulting in immediate dismissal from the program.

## 8.1 <u>Corrective Action Plan</u>

The Corrective Action Plan includes a description of the incident or behavior, steps to be taken to correct the behavior, timetable for completing the plan, and consequences for failure to complete the plan. The plan will be signed by both the student and faculty and kept in the student's permanent record. A corrective action plan may result in reduction of a course grade. Multiple corrective action plans could result in dismissal from the program.

## 9.0 Appeal Process

The appeal process is outlined in the "Code of Student Rights and Responsibilities" on the Dean of Students website.

## 10.0 Withdrawal from the Program

The following steps are necessary when withdrawing from the program:

- 1. The student should meet with a faculty advisor to discuss the withdrawal process.
- 2. The student will return the dosimeter and any other NKU property that is on loan.
- 3. The student will follow the University guidelines for completing the course withdrawal process, securing the appropriate signature when necessary. If a student withdraws from a professional course, the student must also withdraw from the program.

#### 11.0 Dismissal from the Program

Conditions that may result in dismissal from the Radiologic Science Program include, but

#### are not limited to:

- 1. Failure to meet academic standards (see section 2.81).
- 2. Unsatisfactory clinical progress (see section 30.8).
- 3. Failure to meet requirements of a corrective action plan.
- 4. Multiple corrective action plans.
- Patterns of behavior jeopardizing patient safety, individual or group progress and/or contract agreement with the clinical affiliate.
- 6. Patterns of behavior indicating an attitude of irresponsibility to self, patient, profession or University.
- 7. Endangering program or clinical site personnel, fellow students, patients or public.
- 8. Serious violations of clinical site rules and regulations
- 9. Negligence with regard to radiation protection.
- Misuse of dosimeter or a pattern of excessive dosimeter readings that are unexplainable.
- 11. Cheating, forgery, and/or plagiarism, including falsification of records.
- 12. Unethical behavior, including lying and misrepresentation.
- 13. Violation of confidentiality policies.
- 14. Harassment, sexual or otherwise, towards patients, clinical staff, other students, faculty, or anyone else involved with the program.
- 15. Unacceptable criminal background check.

## 11.1 Process for Dismissal Consideration:

- The student's performance records will be reviewed by the program director, the NKU faculty, the clinical coordinator, and/or the appropriate clinical instructor, as appropriate.
- 2. A recommendation will be made in writing and discussed with the student and will become part of the student's permanent record. Any student wishing

to appeal may follow the appeal process found in the Dean of Students website.

## 12.0 Readmission to the Program

A student wishing to be readmitted to the program must make formal application to the program. Readmission must occur within one year of program dismissal or withdrawal; readmission is not guaranteed, but is granted on an individual basis, based on the student's previous records and the availability of clinical placement. To refresh clinical skills and basic knowledge, a student who has not been enrolled in the program for six months or more will be required to enroll in and successfully complete independent study courses prior to continuing in the program on a full-time basis. The program must be completed within four years of initial enrollment in the professional component. A student who does not complete the program within four years must reapply and complete the competitive admissions process. If readmitted, all radiography courses must be repeated. Students dismissed for ethical violations, or for a second time, will not be eligible for readmission for a period of five years from the date of dismissal. Exceptions to this policy may be made on an individual basis.

#### 13.0 Pre-Graduation Assessment Test (PGAT)

A pre-graduate assessment test will be administered to the second-year students as part of RAD 480. The purpose of this test is to:

- 1. Help students identify areas of strength and weakness; and
- 2. Help faculty determine whether program terminal objectives have been met.

A student failing this test may still graduate from the program, providing all other program requirements are satisfied. A very low score, however, may lower the course grade to a C-requiring the student to repeat the course and delaying graduation by up to one year.

## 14.0 Recognition of Student Achievement

Each year, awards are given to graduating students who have demonstrated outstanding clinical performance and scholastic achievement. Awards presented may include:

- Award for Academic Distinction
- Award for Clinical Excellence
- Jim Woods R.T. (R) Award for Outstanding Student Technologist

#### 15.0 **Graduation**

#### 15.1 Requirements

It is the graduating student's responsibility to fulfill all program as well as university requirements for graduation as stated in the *NKU Catalog* and file the necessary paperwork with the office of the Registrar by the deadlines. Degrees will be awarded in May to all students fulfilling graduation requirements by the end of the spring semester. Students earning 3.5 GPA or higher will be recognized as graduating with honors and will receive honors cords for the graduation ceremony.

#### 15.2 Commencement

All students completing program requirements are encouraged to participate in May commencement exercises.

#### 16.0 Application for Registry and Licensure

## 16.1 <u>American Registry of Radiologic Technologists</u>

In the spring of the second year, each student will receive an application form for the computerized ARRT exam. Applications may be submitted up to 3 months prior to graduation. Upon receipt of the application, the ARRT will send the applicant an application status report and admission ticket. The applicant can then schedule an appointment to take the test during the time specified on the Status Report. The ARRT rules and regulations require that candidates successfully complete a

program of formal education before sitting for the exam. After students complete the program, the director will submit verification of program completion to the ARRT. Failure to complete the program requirements prior to sitting for the exam will invalidate the results and the student will have to submit a new exam application to the ARRT.

#### 16.2 State Licensure

Many states require licensure to work as a radiation operator. A student who performs radiographic exams as part of his/her educational program is exempt from licensure requirements by the Commonwealth of Kentucky and the States of Ohio and Indiana. It is the responsibility of any student or graduate seeking employment to contact the appropriate agency to apply for a license. Since the program maintains clinical affiliations with hospitals in Kentucky, Ohio, and Indiana, the following information is provided:

#### 16.21 Kentucky Medical Imaging License

A graduate radiographer who delivers radiation to human patients must be licensed by the Kentucky Board of Medical Imaging and Radiation Therapy.

There are two types of licenses that pertain to graduate radiographers.

- 1. <u>Temporary license</u>. Issued to an individual who has completed an appropriate educational program, allowing him/her to perform radiographic procedures while awaiting examination results. The temporary license will expire on the last day of the month one year following issuance and is not renewable. At that time, application must be made for a medical imaging license.
- 2. <u>Medical Imaging License</u>. Issued to a graduate of an appropriate education program who successfully passed the American Registry of Radiologic Technologists examination; this license allows him/her

to perform all diagnostic radiographic procedures. All applications for a medical imaging license will be filed with the Kentucky Board of Medical Imaging and Radiation Therapy at <a href="http://KBMIRT.KY.gov">http://KBMIRT.KY.gov</a>.

#### 16.22 Ohio and Indiana Licensure

To apply for a license or receive information on licensure in Ohio or Indiana, interested students should contact the appropriate agency below:

Ohio Dept. of Health
Radiologic Licensure
246 North High Street
Columbus, OH 43215
(614) 752-4319
Indiana State Dept of Health
Medical Radiology Services
2 N. Meridian St. #5F
Indianapolis, IN 46204
(317) 233-7563

Fax (614) 466-0381 Email <u>radiology@isdh.in.gov</u>
Email: <u>BRadiation@odh.ohio.gov</u> <u>http://www.state.in.us/isdh/21273.htm</u>

http://www.odh.ohio.gov/odhprograms/rp/rlic/rlic1.aspx

#### 17.0 Student Participation on University Committees & Organizations

A student may be asked to serve on program committees and organizations. Participation is voluntary and in no way will affect the student's grades. Examples of such committees include the Radiologic Science Advisory Task Force, Radiologic Science Curriculum Committee and the Radiologic Science Student Club.

# **POLICIES & PROCEDURES**

**Laboratory & Equipment** 

## 18.0 **General Laboratory Policies**

The laboratory is an educational environment and students are encouraged to utilize the lab outside of the scheduled class time. Appointments should be made with the course instructor. While in the lab, the student must comply with the following rules and regulations:

- **18.1** No student is allowed in the lab <u>at any time</u> without the presence or permission of the lab coordinator, course instructor or program director.
- **18.2** Students must get approval to use the lab for anything other than assigned experiments or projects.
- 18.3 No eating or drinking is allowed in the lab. Exceptions can be made at the discretion of the instructor.
- 18.4 Phantoms must be treated carefully to prevent damage. Replacement costs range from \$200 to \$15,000.
- 18.5 Each group of students is responsible for straightening the room at the end of each lab session. This includes changing the pillow case and cleaning the x-ray table and wall unit.
- **18.6** All accessories, phantoms, cassettes, etc. must be returned to storage at the end of each lab use.
- **18.7** Electrical power to the energized x-ray units including the circuit breakers must be turned off when leaving the area.
- **18.8** Any radiographic equipment, computer, or processor malfunction must be reported to the lab coordinator or course instructor. Examples of items to be reported are:
  - 1. Failure of warning lights.
  - 2. Erratic behavior of meter indicators.
  - 3. Failure of locks to work properly.
  - 4. Sensations of mild electric shock on touching any part of the equipment.
  - 5. Presence of small particles of metal on equipment in the vicinity of moving

components.

- 6. Intermittent function of any instrument, particularly if accompanied by unusual noises.
- **18.9** Students must not attempt to repair malfunctioning equipment. All maintenance should be conducted by qualified service engineers.

#### 19.0 Radiation Safety Policies

- **19.1** Dosimeters must be worn during lab classes. (This policy is further addressed in the laboratory course syllabi.)
- **19.2** No student will remain in the room during an x-ray exposure.
- 19.3 No exposure will be made on human subjects. Intentional exposure of another person will result in immediate dismissal from the program. Accidental exposure of another person will result in a written warning and the student will be subject to corrective action. (See 8.1)
- **19.4** Failure to use appropriate radiation safety procedures may result in immediate suspension and/or dismissal from the program.

#### 20.0 Procedures for Proper Care and Maintenance of Equipment

The student should translate attitudes about caring for personally owned expensive equipment to the equipment in the workplace. A piece of diagnostic x-ray equipment may cost in excess of \$100,000. Students may be liable for repair costs incurred by their negligence. The following reminders will protect the life of the equipment:

- **20.1** Never move equipment rapidly and then use the locks to stop the motion. This applies to bucky trays as well as tube locks.
- 20.2 Treat the x-ray tube gently. Rough handling of the x-ray tube can cause movement of the insert in the tube housing. This can lead to non-alignment of the x-ray beam and light beam.

- 20.3 Never use the cables to move the x-ray tube. If fraying of the cable is noted, the machine should be shut down and the damage should be reported immediately. The machine should not be used until repair is made.
- **20.4** Students should not engage the rotor for long periods of time prior to making an exposure.
- 20.5 Tube ratings must not be checked by attempting to make an exposure that exceeds the limit for that tube.
- **20.6** The x-ray tube must always be placed over the table with the collimator pointed toward the tabletop (as for a vertical x-ray beam) before the power is shut off.

## 21.0 Computer Usage

The Department of Allied Health has computers available for student use. The computers are located in the Albright Health Center, Rooms 249 and 253.

- Students may use the computers at any time during normal office hours, or as posted.
- Students must supply their own data storage devices. Items saved on the computer hard drives will be deleted.
- 3. Food and drinks are not permitted at the computer stations.
- 4. Students are not permitted to load personal programs on computers or change settings.

## **POLICIES & PROCEDURES**

**Clinical Coursework** 

The Radiologic Science Program at Northern Kentucky University is affiliated with a variety of hospitals and office practices to provide suitable facilities for all phases of education in radiography. The program maintains an affiliation agreement with each clinical education setting that defines each party's separate and joint responsibilities.

All "hands-on" experience at the hospitals is provided in clinical courses called radiographic practica. Students spend two to three 8-hour days each week working with patients in the radiology department at one of the hospitals. The practica offer the students extensive experience in an actual radiology department and are designed to train professionals who are competent to perform all entry level radiographic procedures. In addition, practica experience helps students develop and practice professional work habits and appropriate interpersonal relationships with other members of the health-care team and with patients. While at the hospital, students are supervised by registered radiographers.

## 22.0 Clinical Education Settings

The affiliated clinical education settings and their distance from campus are listed below:

Cincinnati Children's Hospital Medical Center (CCHMC)	10 miles
Commonwealth Orthopaedics	9 – 16 miles
Dearborn County Hospital	32 miles
Mercy Health Anderson Hospital	10 miles
Mercy Health Clermont Hospital	21 miles
Mercy Health - The Jewish Hospital	19 miles
St. Elizabeth Healthcare – Covington	7 miles
St. Elizabeth Healthcare – Edgewood	10 miles
St. Elizabeth Healthcare – Florence	13 miles
St. Elizabeth Healthcare – Ft. Thomas	4 miles
St. Elizabeth Healthcare – Grant County	40 miles
St. Elizabeth Imaging – Hebron	18 miles
St. Elizabeth Physicians Urgent Care- Florence	16 miles
St. Elizabeth Urgent Care - Newport\Ft. Thomas	4 miles
Wellington Orthopaedics & Sports Medicine	8 – 15 miles

## 22.1 Clinical Assignments

While in the program, each student is assigned to at least two hospitals and one office practice to insure a well-rounded clinical experience. When a student is accepted into the program, he/she is usually assigned to one affiliated hospital for the first three radiographic practica. Students' clinical assignments may be changed at any time during the first year for extenuating circumstances. Students will be assigned to a different clinical site for their second professional year. Also, during the program, students will complete rotations at an orthopaedic office, and a pediatric facility. Students may also be assigned to an outpatient imaging center and\or an urgent care facility. The rotations will be scheduled by the clinical coordinator. Clinical assignments will vary in the third professional year. Students will have the opportunity to apply for a focused clinical experience, which consists of a 7-week rotation in a specialty area.

## 22.2 Scheduling of Clinical Coursework

The clinical practica parallel the University schedule during the fall and spring semesters and during the one five-week summer session.

COURSE	DAYS SCHEDULED	DURATION
Rad. Practicum I	Tuesday/Thursday	15 weeks
Rad. Practicum II	Tuesday/Thursday	15 weeks
Rad. Practicum III	Monday through Friday	5 weeks
Rad. Practicum IV	Monday/Wednesday/Friday	15 weeks
Rad. Practicum V	Monday/Wednesday/Friday	15 weeks
Rad. Practicum VI	Days will vary	15 weeks
Rad. Practicum VII	Days will vary	15 weeks

During the regular semester, clinical practicum hours will typically be from 7:30 am to 4:00 pm but will occasionally vary, according to rotation and shift scheduling and may go as late as 6:30pm. During the second and third professional years, students

will be scheduled for periodic second shift rotations that will go as late as 10:00 or 11:00pm. Clinical hours are scheduled by the clinical coordinator and are not flexible. That is, students may not clock in early and leave early.

## 22.3 Radiology Room/Area Assignment

Radiology room/area assignments will be made by the NKU clinical coordinator no later than the beginning of each semester and may be changed only by the NKU clinical faculty. Objectives have been developed for various clinical assignments identifying what students should expect to learn and do in those areas. These objectives are available to students at all times via the electronic learning management system (Blackboard) and are also given to students during the appropriate clinical practicum. The clinical instructor at the clinical education setting has the right to make temporary changes for educationally valid reasons.

## 22.31 Mammography Rotation

All students have the option to participate in a clinical rotation through mammography. Students will indicate whether they want to choose this option or not on the appropriate specialty selection form and submit it to the clinical coordinator.

#### 22.32 CCHMC

All students will be scheduled for a pediatric clinical rotation through CCHMC during RAD 296. Additionally, students will have the opportunity to complete another rotation through CCHMC during the second professional year. Students may waive the pediatric rotation during RAD 386/396.

## 22.4 <u>Lunch and Break Scheduling</u>

Students are required to follow the department policies regarding breaks and lunch periods. Some departments may take morning and afternoon breaks with a shorter lunch period (30 minutes), while other departments may not take breaks, but take a

longer lunch period (maximum 45 minutes). Students should see the clinical instructors at each site for specific lunch and break protocols. Lunches and breaks will be assigned by department leaders or clinical instructors. All students are required to remain at their clinical sites during the lunch period. Cafeterias and/or break rooms are available at each facility.

If there is a need for an exception to this policy, the student must get approval from the clinical instructor prior to leaving the site. Students must clock out and back in.

If a student is at an orthopaedic site, follow the direction of the technologist.

## 22.5 Clinical Classes

As part of the clinical practica, students are required to attend regularly scheduled classes taught by NKU faculty at the affiliate hospitals (on NKU campus for RAD 486 and 496). Each clinical class will meet during finals week to complete evaluations and course grades. Attendance at the final clinical class is mandatory; a sick/personal day may not be used. Failure to attend this class will result in lowering the course grade as specified in the course syllabus.

## 23.0 Attendance Policy

Development of good professional habits in the area of attendance and punctuality is an integral part of the students' clinical education. Students are responsible for attending on all scheduled days and for monitoring their attendance records. Frequent absenteeism or tardiness reflects a pattern of behavior that indicates an attitude of irresponsibility that will affect the student's grade.

## 23.1 <u>Time Cards</u>

Students are required to maintain accurate attendance records using time cards. Each student must independently clock in and out. If a student fails to clock in or out, or if the time cannot be read, attendance cannot be verified and it will be considered a time record infraction. Each time card infraction will result in a one-

point deduction from the attendance points. If time clocks are not operating correctly, the student must ask the clinical instructor to document the correct date and time and sign a time card. If the clinical instructor is unavailable, the student may ask the radiographer with whom he/she is scheduled to work. If a time card is lost, one point is deducted for each day on the lost card. Students are responsible for completing another time card and having the dates and times verified by the clinical instructor. Students leaving the clinical site for any reason must clock out and then clock in upon their return. Time card fraud is an ethical violation and will result in dismissal from the program.

## 23.2 Tardiness

Students are expected to be on the floor at the start of the shift as indicated on the time clock or program. A tardy is defined as clocking in from one to sixty minutes late or clocking out from one to sixty minutes early. Any time a student clocks in within one hour after the start of the shift, or leaves within one hour of the end of the shift, she/he is considered tardy, regardless of the length of time. If a student is more than one hour late, it is considered an absence and an absence report must be completed. Tardies will affect the course grade, and attendance points will be reduced according to the course syllabus. Tardies of one hour or less should be made up on the same day, or the next clinical day, at the end of the shift.

## 23.3 Excused Absences

Students are expected to attend on all scheduled days and to report on or before the beginning of the shift. An excused absence will be granted when illness or personal obligations prevent the student from attending as scheduled and the clinical site is notified before the start of the shift. Students must take excused absences in 8-hour or 4-hour increments as specified in the course syllabus. A student may accrue up to eight hours of excused absence time before the course grade is

affected. Excused absences in excess of 8 hours will result in a reduction of attendance points according to the course syllabus, which may affect the course letter grade. An absence report must be completed for all excused absences (1 hour or less is considered a tardy and a form is not necessary.). Extended absences due to extenuating circumstances will be evaluated on an individual basis by the clinical faculty and clinical coordinator. Occasionally, a student may need to leave the clinical site a little early for a necessary appointment. Excused absence time of one hour or less at the end of the day will be treated as a tardy. (See 23.2)

## 23.4 Absence Reporting

A student who is unable to report to the clinical site for any reason should call the clinical site <u>and</u> the NKU clinical coordinator, (859) 572-5187, prior to the start of the shift. Failure to call the clinical site before the start of the shift will result in an unexcused absence (see 23.6).

An Absence Report Form must be completed for all missed clinical time of more than one hour. Students will be provided with these forms during each clinical practicum. Students are responsible for completing the absence form and submitting it to NKU clinical faculty. Absence reports must be submitted by the next scheduled clinical class or by the last day of the clinical practicum - whichever comes first. Points will be deducted from the attendance points for each absence report not submitted on time, as stated in the course syllabus.

## 23.5 Scheduling Make-Up Time

All excused clinical absences will be recorded and counted as either four or eight hours for make-up scheduling purposes. If necessary, makeup time will be scheduled by NKU clinical faculty on Saturdays or following final exams; Saturday make-up time is voluntary. Make-up time for absences cannot be added on to the end of a shift, scheduled on University holidays, Sundays, or as a double shift.

Failure to make up absences as scheduled will result in an unexcused absence. Make-up time completed without approval of the course instructor will not count as make-up time. Saturday make-up time resulting in more than 40 hours of scheduled program activity must be requested of the NKU clinical faculty in writing. All make-up time must be completed as scheduled prior to the end of the course. If clinical make-up time cannot be completed by the end of the semester due to extenuating circumstances, the student may request, in writing, an "I" (Incomplete) and completion of make-up time may be extended to the University's date for course completion. If course requirements are not met by that date, the "I" grade will be converted to an "F" at that time. If the student does not request an incomplete, a final course grade will be calculated with a reduction of one letter grade for EACH uncompleted make-up occurrence.

If an incomplete grade is requested, the student must submit her/his final time card to the clinical faculty or coordinator to verify the completion of make-up time, and receive a grade for the course. Exceptions to the make-up policy may be made for extenuating circumstances at which time the student must request a grade of incomplete.

## 23.6 Unexcused Absences

An absence will be considered unexcused if a student:

- Fails to notify the imaging department <u>before the start of the shift or prior to</u>
   leaving early
- 2. Fails to make up absences as scheduled by the NKU clinical faculty
- 3. Has been suspended from clinical as the result of a corrective action plan
- Fails to attend the last clinical class scheduled during final exam week or exam day during the summer session

## FOR EACH UNEXCUSED ABSENCE THE FINAL CLINICAL COURSE GRADE

# WILL BE REDUCED BY A LETTER GRADE. EXCEPTIONS MAY BE MADE FOR EXTENUATING CIRCUMSTANCES.

## 23.7 Severe Weather

The University has a severe weather policy. If NKU is closed, all clinical practica are canceled also. Any clinical time missed due to severe weather when NKU is not closed must be made up. The University's Emergency Closing Policy can be found at <a href="http://hr.nku.edu/hrpolicies/absence\_leaves/emergency\_closing.html">http://hr.nku.edu/hrpolicies/absence\_leaves/emergency\_closing.html</a> or by calling (859) 572-6165 or (859) 572-6166.

## 23.8 Holidays

The Radiologic Science Program and NKU recognize the following holidays: Labor Day, Thanksgiving, Christmas, New Year's Day, Martin Luther King Day, Memorial Day and Independence Day. Students will not attend the clinical practicum on these holidays.

## 23.9 Special/Emergency Leave

Special or emergency leave may be approved by the program director. Examples include extended disability, family emergency and funeral leave. Absences may be made up on Saturdays, if possible, or at the end of the semester. Make-up for extended absences will be scheduled in consultation with the clinical coordinator. Alterations to this policy may be made for extenuating circumstances, as determined by the clinical coordinator.

## 24.0 Standards of Appearance and Attire

The personal appearance and demeanor of Radiologic Science students at Northern Kentucky University reflect both the University's and the profession's standards. Appearance is also indicative of the student's interest and pride in his or her profession. Standards of clinical appearance and attire are set by the NKU faculty and Advisory

Committee. All students are required to adhere to the following dress code policy:

- Students must wear the professional uniform approved by the program. A plain white or black T-shirt may be worn under scrub tops.
- The professional uniform should be clean, neatly pressed and in good condition.
   Uniforms are required to be conservative in style. Wrinkled fabric is not appropriate for uniforms worn in the radiology department.
- A uniform should not appear provocative or seductive. The uniform top must cover the midriff at all times.
- 4. Undergarments must not be visible.
- Black lab coats with program logo may be worn for warmth over the uniform top or dress.
- 6. Shoes should provide excellent support and protection for the foot; they should be white or black leather and should completely enclose the foot (no clog-style shoes).
  White or black walking shoes are acceptable. Shoes that make excessive noise are unacceptable. Shoes must be kept clean and polished.
- 7. Photo ID badges and dosimeters must be worn at all times. Students will purchase an NKU photo ID badge through the All-Card office on campus. In addition, some clinical sites require students to wear an ID sticker. An ID sticker will be distributed to the student before the start of the semester.
- 8. Hospital-owned scrub clothes may be worn ONLY while working in surgery or when working in areas where personal clothing is subject to contamination such as special procedures and cardiac catheterization.
- 9. For professional appearance, jewelry should be conservative. Jewelry, if worn, must be limited to: wedding, engagement, or class rings, watches, short simple chains, and two small earrings that do not dangle. For safety, no bracelets, long chains, or dangling earrings may be worn.

- 10. Hair must be neatly groomed and styled to avoid contact with the patient. Beards and mustaches must be of reasonable length and neatly trimmed.
- 11. Facial and tongue piercings are unprofessional in appearance and are not acceptable. No visible body piercing beyond two earrings per ear is allowed. Some clinical sites may be more restrictive in the policy concerning professional appearance, and in this case students must adhere to the site policies. For this reason, students may be required to cover tattoos.
- 12. Good physical hygiene including body and hair cleanliness and daily oral care must be followed. Because sick patients are easily nauseated by smells, fragrances, perfume, cologne, and aftershave should be minimal.
- 13. Students must follow CDC Hand Hygiene Guidelines, which prohibit artificial nails, nail polish, and fingernail length in excess of ½".

A student who violates NKU standards for appearance and attire will be told he or she is in violation and will be required to conform to the standards. This may require immediate clinical suspension (clocking out) until the problem is satisfactorily corrected. Clinical suspension for violation of the dress code policy will comply with the attendance policy. Repeated violations may result in disciplinary action.

## 25.0 Standards of Clinical Behavior

The Radiologic Science student is a member of the health care team and is expected to adopt a model of professional behavior. The following standards of clinical behavior are based on <a href="Code of Ethics for the Radiographer">Code of Ethics for the Radiographer</a> (<a href="https://www.arrt.org/about-the-profession/arrt-certification-and-registration/requirements/ethics">https://www.arrt.org/about-the-profession/arrt-certification-and-registration/requirements/ethics</a>) and are enforced by the NKU faculty.

 The student must remain in his or her assigned area unless the unit is not being utilized. With permission of the clinical instructor or supervising radiographer, the student may move to a busier area. If the clinical instructor or supervising

- radiographer cannot locate a student, disciplinary action will be initiated. (See 8.0)
- The student is expected to observe and/or participate in all procedures performed in his/her assigned area.
- The student must assist the radiographer in performing all radiography related tasks,
   to include patient care, room cleanliness, supply acquisition, etc.
- 4. The student must notify his/her supervising radiographer before leaving any assigned area.
- Use of any (prescribed or non-prescribed) drugs that may affect motor skills or cognitive function is prohibited during clinical assignments.
- 6. The student must restrict gum chewing, eating and drinking to non-patient areas. All hospitals have "no smoking" policies and it is the student's responsibility to be familiar with and adhere to these policies.
- 7. Physicians must be addressed by the title "Dr." at all times.
- 8. No student may accept a gratuity from a patient.
- 9. The student must follow the program's Cell Phone Use and Social Media policies (see 2.4 and 2.5).
- 10. Computers at the clinical sites are to be used only in the scope of patient care. Students may not access these computers for personal needs, or for any reasons unrelated to direct patient care, including access of their own medical records.
- Students who are employed at one of the clinical affiliates may not use employee computer log-on, parking pass, ID or swipe badge while participating in clinical practicum as an NKU student.

Failure to adhere to any of these standards listed above will result in disciplinary action (see section 8.0).

## 25.1 Confidentiality

Breach of confidence is damaging to the reputations of both the program and the

hospital and has legal and ethical implications. Patient information is highly confidential and shall not be revealed to anyone. Medical information can be shared with other department personnel <u>only</u> in the direct line of duty to meet specific medical needs. During the program, patient case studies may be discussed in class and may include written assignments and radiographs. Students may not access images of a "sensitive nature." This includes but is not limited to:

- morgue files
- luminaries/celebrities
- active legal cases
- files labeled as "confidential"
- any clinical education center employee, family member or affiliate

These records may neither be accessed nor copied, even under an educational pretense. Prior to printing radiographs or burning cases on CDs, the student must request permission from the clinical instructor. At no time should patient and/or hospital identification be included on printed or electronic images taken from the clinical sites. Students are strictly prohibited from photographing any patient images and/or records. All students must sign the program's statement of confidentiality form (Appendix D) and comply with specific confidentiality policies at the clinical sites. If a clinical site has its own policy regarding reproduction of images, students assigned to that site are required to follow the policy.

## 26.0 Health and Safety Standards

## 26.1 Illness

- 26.11 If the student is too ill to attend clinical practicum, the <u>imaging department</u> and NKU's clinical coordinator must be notified as soon as possible <u>prior to</u> the scheduled starting time (see 23.3).
- 26.12 A student is expected to use good judgment in determining whether or not to attend clinical practicum because of illness. The clinical

instructor/supervisor has the authority to dismiss a student from the clinical site if the student's illness might compromise patient care. The program's regular attendance policy will apply to these situations.

- 26.13 A student who has a communicable disease may be restricted from working with high risk patients. Examples of common communicable diseases include herpes simplex (fever blisters), hepatitis, cold, and flu. If a student has a suspected communicable disease, he/she should contact the clinical coordinator, clinical instructor, or the floor supervisor before the start of the shift. Changes in the student clinical assignment may be required. Protective measures that may be taken include:
  - The student may be required to use reverse isolation techniques while working with non-high risk patients.
  - The student may be suspended from clinical coursework until he or she is no longer contagious as documented by a physician if necessary.

## 26.2 Injury

If a student becomes acutely ill or injured in the course of assigned clinical duties, the hospital to which that student is assigned will provide emergency treatment only. This provision for treatment does not apply to any communicable disease. The student is responsible for payment of any treatment provided. Any injury, however minor, that occurs while at the hospital <u>must</u> be reported to the supervising radiographer. This rule is designed to protect both the student and the institution by ensuring that appropriate treatment is given.

## 26.3 **Substance Abuse Policy**

When there is probable cause to believe that a student is unable to perform clinical/laboratory activities as assigned with reasonable skill and safety to patients

or equipment due to use of alcohol, drugs, narcotics, chemicals or any other substance which could result in mental or physical impairment, the student will be suspended from the program pending evaluation of the incident by the program director. The clinical affiliate, at its discretion, can order a drug screen if substance abuse is suspected. The student may be required to bear the cost of this screening. (See "Code of Student Rights and Responsibilities" at <a href="http://deanofstudents.nku.edu/policies/student-rights.html">http://deanofstudents.nku.edu/policies/student-rights.html</a>)

## 26.4 Infection Control Procedures

A health care worker in today's world must expect to encounter unidentified or undiagnosed cases of infectious diseases. Appropriate Infection Control Procedures must be followed whenever there is a possibility of exposure to blood or other body fluids, regardless of the patient's diagnosis or condition.

## 26.5 Patient Safety

The student has equal responsibility with hospital employees for the safety of the patient. Each student will know the location of first aid supplies and the emergency "crash cart." The student will also be familiar with the hospital's fire and safety codes. Any mechanical or electrical malfunction of equipment that could cause injury to patients or staff must be reported immediately.

## 26.6 Patient Injury

The student is responsible for using all safety precautions to protect the patient.

Should a patient be injured, the student shall do the following:

- Immediately report the incident, no matter how minor, to the supervising radiographer
- 2. Call a physician/radiologist to examine the patient
- 3. Complete the hospital's incident form

## 26.7 **Professional Liability Insurance**

All students must purchase professional liability insurance through the University with limits of \$1,000,000 for each incident and \$3,000,000 aggregate. The fee for this policy is assessed annually as a course fee in each professional year.

## 27.0 Radiation Safety and Monitoring

Radiation monitoring devices (dosimeters) will be issued to each student at the beginning of the program. The policies regarding the use of the dosimeter are as follows:

- The dosimeter is to be worn at collar level at all times in the NKU laboratory and during the clinical assignment at the affiliate hospital.
- 2. During fluoroscopy, the dosimeter will be worn at collar level outside the lead apron
- 3. Dosimeters will be worn ONLY when working as an NKU student.
- 4. A student who is not wearing a dosimeter (due to loss or destruction) will be suspended from the clinical assignment until the dosimeter has been replaced and three points will be deducted from the clinical grade. An absence report form must also be completed. The time missed will be considered excused and will count toward total make-up time, but not toward absence points.
- 5. A student who loses his/her dosimeter may be required to pay a replacement fee of up to \$75. Should a dosimeter replacement fee be incurred but not paid by the end of the term, an additional dosimeter infraction will be assessed.
- Students are to change their dosimeter in the Radiologic Science Program office within the first five weekdays of each month. If a student does not change his/her dosimeter on time it will be considered a dosimeter infraction and three points will be deducted from the clinical grade. Arriving at the clinical site without a dosimeter is considered a dosimeter infraction with a three-point deduction in the clinical course grade. The student must clock out and leave the clinical site immediately to retrieve the dosimeter. The student will clock in upon return to the clinical site.

- 7. Radiation exposure reports will be available in the program office each month. Each student is required to initial the radiation exposure report at the time they change their dosimeter, indicating awareness of personal radiation exposure.
- 8. A student who operates fluoroscopy at the clinical site must complete a fluoro record card and submit it to the NKU clinical faculty. This information is retained in the student's file and used as documentation in cases of high dosimeter readings.

## 27.1 Radiation Dose Limits for Students

- 27.11 A student who receives more than 50 mR in any one month will be notified by the program director. A student who receives more than 100 mR in any one month will be counseled by the program director and must follow a Corrective Action Plan. A student who repeatedly receives more than 100 mR per month may be suspended from the program.
- 27.12 A student who receives more than 375 mR per calendar quarter will be suspended from the clinical practicum, pending investigation of the incident. A student may be reinstated in the clinical practicum after counseling by the program director and must follow a Corrective Action Plan. Clinical suspension will be made up according to the absence policy.
- 27.13 A student who receives more than 500 mR in a calendar year or who, after investigation, was found to use improper radiation safety practices, will be dismissed from the program.
- 27.14 A student who loses a dosimeter at the hospital or who is aware of an accidental exposure must document the incident in writing and submit this to the program director. This information will remain in the student's file and will be used to justify potential high dosimeter readings.
- 27.2 The student will NOT hold patients or image receptors while exposures are made during non-fluoroscopic radiographic examinations. Documentation that a student

has held a patient or image receptor during an exposure will result in corrective action.

## 28.0 Temporary Suspension by Clinical Personnel

The clinical instructor has the right, responsibility, and authority to temporarily suspend a student from clinical practicum if:

- **28.1** The student commits an act endangering hospital personnel, fellow students, patients, or public.
- **28.2** The student has seriously violated hospital, physician's office, imaging department or program rules and regulations.
- **28.3** The student is not performing clinically related activities.
- **28.4** The student abuses the dress code policies.
- **28.5** The student engages in unprofessional behavior, including dishonesty.

Other reasons for temporary suspension include but are not limited to:

insubordination and improper radiation safety practices. For any student dismissed from a clinical education center, there is no guarantee of reassignment to another clinical site. In this case, the student would be dismissed from the program. Appeals to such action shall be conducted in accordance with NKU's "Code of Student Rights and Responsibilities".

## 29.0 Supervision

Students must have adequate and proper supervision during the performance of all clinical assignments. Infractions of the supervision policy will result in disciplinary action as described in section 8.0.

<u>Direct Supervision</u>: A qualified radiographer is present and supervises all aspects of the work undertaken by the student. Students in the first professional year must be directly supervised at all times. Students at other levels of education must be directly supervised until competency is demonstrated. Students in the second and third professional years may

work with indirect supervision as long as they have demonstrated competency on the exam. If the student's competence has not yet been verified, or if the patient requires close supervision, the student must perform the examination with direct supervision.

Indirect Supervision: A qualified radiographer is in an adjacent area and is available for immediate assistance to the student. To determine whether the student requires direct or indirect supervision, a qualified radiographer must review the work request, assess the patient condition and consult the student's competency record. If the student's competence has been verified and the patient's condition does not warrant close supervision, the student may be given indirect supervision. Even when the student works under indirect supervision, a qualified radiographer or radiologist must check and approve the radiographs taken by the student prior to the dismissal of the patient.

<u>Supervision for Repeat Examinations</u>: Repeat examinations must be performed under direct supervision at all times.

## 30.0 Clinical Competency Evaluation System

Clinical education provides a professional environment where the student can build upon his/her classroom knowledge to develop the technical and interpersonal skills needed to achieve professional competence.

The Radiologic Science Program at NKU has developed a progressive competency system that allows the student to move toward increased independence and skill. Following classroom instruction, laboratory practice and evaluations, the student works toward achieving competency in the clinical setting. The student first observes the procedure, then assists the radiographer, progressively assuming more responsibility in performing the radiographic procedure until enough skill and confidence has been achieved to request competency testing. Once initial competency has been established, the student is expected to continue to perform the exam to enhance competency and develop proficiency. The student may request re-evaluation to demonstrate continued competency. (See definitions

of initial and continued competency below.) The student may complete competency exams for the non-routine requirement Category C at any time after they have completed the necessary classroom instruction and/or clinical rotation. All clinical evaluation forms will be included in clinical course packets, which students will purchase from the NKU Bookstore, as well as in electronic form in the program's Blackboard organization. NKU's Radiologic Science competency evaluation system has three parts:

## 1. <u>Laboratory Evaluation</u>:

To ensure his/her knowledge of the basic procedural steps for the radiographic examination, the student is evaluated by a member of the faculty through simulation in the laboratory. A record of procedures for which each student is "laboratory competent" will be posted in the hospital control area. After being "checked off" in lab, the student is responsible for updating this information at the hospital in the work control area.

## 2. Procedure Evaluation:

After demonstrating laboratory competence, the student may be assessed for clinical competency by performing the procedure on a patient. At that time, he/she will notify the radiographer and give him/her a "Procedure Evaluation Form" prior to starting the exam. The radiographer will evaluate the student's performance during the procedure and complete and sign the form to verify the student performed the procedure. The student must complete the reverse side of the form which includes patient history and exam information. Repeated images will be documented by the radiographer on the "Procedure Evaluation Form." Once a student initiates a competency evaluation, he/she must complete the process and submit the graded form to the clinical faculty.

To ensure continuity of care and instill patient confidence, multiple exams on the same patient should be completed by one student. Failure to comply with this policy

may result in those competencies not being accepted.

## 3. <u>Image Evaluation</u>:

The "Image Evaluation Form" is completed by the NKU faculty during scheduled image critique classes held at the clinical site. The student will bring radiographs or computed images to class (as specified in each course syllabus) and present them for evaluation. The presentation will include an evaluation of the necessary image identification, the radiation protection used, a critique of the positioning, identification of the anatomy that was visualized and an analysis of the image quality that was produced. When being graded on GI exams, digital images obtained in lieu of routine overhead projections must be brought to clinical class for image evaluation. Fluoroscopic C-arm exams that do not require a printed image may be considered as a procedure evaluation only. Printed C-arm fluoroscopic images will be accepted for image evaluation. If the scores on the Procedure and Image Evaluations equal or exceed 85%, the student is considered competent to perform the exam. If the scores are less than 85%, the student must acquire more skill and be re-evaluated.

## 30.1 <u>Initial Competency Evaluation Procedure</u>

Initial competency can be defined as the first formal demonstration of the ability to perform a radiographic examination independently and to produce images that meet or exceed professional standards.

Either a registered staff radiographer or the CI may evaluate a student's procedural performance provided that:

- 1. The student has been "checked off" in the laboratory at NKU;
- 2. The student requests evaluation BEFORE starting the procedure;
- 3. The student provides an evaluation form for the radiographers;
- 4. The evaluating radiographer is able to observe the performance

## CONTINUOUSLY AND DIRECTLY

- 5. The student completes the examination independently or with minimal assistance.
- 6. If the evaluating radiographer believes that the student is not capable of performing the procedure independently, he/she may discontinue the evaluation at any time and provide the needed assistance. The evaluating radiographer should complete the competency evaluation form indicating the student needed continuous assistance. The student is obligated to then turn in that evaluation.

## 30.2 <u>Continued Competency Re-Comp Procedure</u>

Continued Competency is defined as the re-evaluation of a procedure for which the student has already demonstrated competence. Repeated evaluation is done to assure the student has maintained the skills needed to perform examinations.

- 30.21 Students in the first professional year must be directly and continuously evaluated by a radiographer during both initial and continued competency examinations.
- 30.22 Students in the second and third professional years may be indirectly supervised during continued competency examinations. A radiographer, however, must review the images and complete and sign the procedure form to verify that the student performed the procedure.

## 30.3 Competency Record Form

When a student earns a passing competency score, that score is recorded on the Competency Record Form (see Appendix E) that is kept in the student's clinical file. The student's competency is also recorded on the lab competency form posted in the hospital's radiology control area where all radiographers can review it.

## 30.4 Competency Requirements for Clinical Coursework

Competency requirements for each practicum have been established. The exam categories correspond to the content taught concurrently in the classroom. The student may elect to do any combination of initial and continued competency exams to meet the total requirement.

## **Competency Requirements**

<u>RAD 286 (fall)</u> <u>RAD 386 (fall)</u> <u>RAD 486 (fall)</u>

Category A = 12 Category A/B/C = 12 10 or 20 procedures per

syllabus plus requirements

per focus block

<u>RAD 296 (spring)</u> <u>RAD 396 (spring)</u> <u>RAD 496 (spring)</u>

Category A/B/C = 12 Category A/B/C = 12 10 or 20 procedures per

syllabus plus requirements

per 'focus block

RAD 376 (summer) Category A/B/C = 12

## 30.5 Competency Requirements for Progression

A student is required to have demonstrated competency in 60 separate procedures from Categories A-C as listed on the Competency Record Form. (See Appendix F, Competency Record Form Guidelines). Of the 60 required examinations, a minimum of 6 procedures must have been completed from Category C, and at least 15 exams must be E and R.

All (R, R) required examinations must have procedure and image evaluations completed, and must have received grades of 85% or above to count for competency by the end of the 2<sup>nd</sup> professional year. Any student who does not meet this requirement by the end of RAD 396 may not be eligible for a clinical focus in RAD 486. A student who has not completed program competency requirements by the end of RAD 496 will be required to continue in the program until those requirements have been met, either by repeating a clinical practicum or enrolling

RAD 499 for an independent study clinical practicum. The steps necessary for program completion will be outlined by the program director and will be based on the deficient requirement(s).

## 30.6 Early Completion of Competency Requirements

The student may complete more than the minimum required competency exams each semester. Additional competencies will count toward the total program competency requirement, but will not count toward the next semester's requirements.

## 30.7 Pediatric Competency Requirements

To ensure that program graduates are capable of performing radiographic examinations on pediatric as well as adult patients, each student must demonstrate competency on at least one exam as indicated on the "Competency Record Form," Section B. To ensure that the student is competent to perform basic adult procedures before attempting to demonstrate competence with children but still allow students to be evaluated on examinations which primarily involve children, the following guidelines have been developed:

- "Pediatric," as used in this policy, is defined as a child 6 years of age or younger.
- Initial competency on chest and KUB examinations cannot be performed on pediatric patients. These exams can be performed on pediatric patients only after competency has been demonstrated on adult patients.
- All other pediatric exams will be accepted for initial competency, beginning with RAD 296, Clinical Practicum II.

## 30.8 Geriatric Competency Requirements

In order to meet ARRT competency requirements, students must also demonstrate competency on geriatric patients for chest and upper and lower extremity exams.

For these exams, geriatric is defined as at least 65 years of age *and* physically or cognitively impaired as a result of aging.

## 30.9 Clinical Competency

If at any point in his or her education a student demonstrates critical clinical errors, lack of judgment, or clinical and/or lab incompetence, a corrective action plan will be implemented. Situations that may prompt a corrective action plan include:

- Failure of a Continued Competency Assessment
- Failure of two Clinical Competencies during one semester
- Unsatisfactory clinical evaluations (<85%)</li>
- Notification in writing by clinical personnel or lab positioning instructor that a student is consistently not performing at an appropriate level.

As with any Corrective Action Plan, failure to meet the requirements of the individual plan may result in program dismissal (see 11.0).

## 31.0 General Clinical Evaluation

In order to assess the student's overall performance, behavior and progress, a General Clinical Evaluation Form must be completed as specified in the course syllabus. This form is included in each clinical course packet purchased from the NKU Bookstore. The evaluation form requires the clinical instructor or supervising radiographer to identify behaviors that describe the student's performance during the rotation and asks for comments concerning the student's progress.

- 31.1 It is the student's responsibility to provide the evaluation form to the radiographer who was the primary room/area supervisor during the rotation.
- 31.2 General Clinical Evaluation Forms must be submitted for a grade according to the course syllabus. NO LATE EVALUATIONS WILL BE ACCEPTED and a grade of "0" will be recorded.

## 32.0 Professional Development

Students are encouraged to participate in professional organizations. To that end, each student must participate annually in a minimum of four hours of pre-approved professional conferences, seminars or workshops. Students will complete a Professional Development Documentation form for each event that is attended and submit it along with a verification form or certificate received at the event to the clinical coordinator. Documentation forms will be provided to students. Annual participation in these activities is a component of the spring clinical courses (RAD 296, RAD 396 and RAD 496).

## 33.0 Clinical Activities

Because development of a skill occurs only after repeated observation/practice, students are expected to observe or assist with any procedure being performed, regardless of level of competence. Skills are best learned through active participation. Occasionally, imaging departments are slow. Historically, problems have occurred when students bring in books to study for tests and do not participate in radiographic procedures when patients are in the department. As long as students remain in an area where they can see what is going on in the department and participate in any procedure that comes in, students may engage in other appropriate activities. Students are expected to observe and/or participate in all radiographic procedures-regardless of level of competence. The following list includes educationally valid and appropriate activities for times when there are no patients in the department. The clinical instructor and/or assigned radiographer must be consulted prior to leaving an assigned area.

- Practice positioning in radiographic rooms
- Manipulate equipment (especially first year students)
- Read/review discipline-related texts and notes
- Quiz fellow students

- Pull images from the patient files and critique for positioning accuracy, scale of contrast, density, visibility of sharpness, geometric sharpness, etc.
- Review anatomy using radiographic images
- Set various techniques on the control panel; reinforce knowledge of all controls
- Gather good techniques from a variety of radiographers and keep them in a notebook
- Ask permission to listen to radiologists read images
- Ask clinical instructor for permission to observe in a specialty area for a limited period of time
- Learn something new about ancillary equipment kept in radiography rooms;
   example: suction equipment
- Look at the procedure manual for the department; learn department routines
   Failure to follow this policy may result in disciplinary action (see 8.0).