Radiologic Technology Program

Clinical Handbook

2018-2020

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CLINICAL FORMS AND INSTRUCTIONS SECTION

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STUDENT CLINICAL HANDBOOK INTRODUCTION

This handbook is designed to outline the policies and procedures followed by the students in the clinical environment while enrolled in the Radiologic Technology Program at Shawnee State University. Each student should become aware of the policies and procedures contained herein for the satisfactory completion of the clinical requirements of the Radiologic Technology Program.

In this handbook the student will find the necessary objectives and requirements for the satisfactory completion of each semester of clinical education along with the method of grading for each. Also, criteria for student's evaluation in the clinical setting are included.

Your clinical sessions are the place where you can apply what you have learned in the classroom and practiced in the laboratory. As you progress throughout the year, you will be performing more independently. As you approach the end of the program you will have gained the knowledge and ability to perform all radiographic procedures performed in a general or acute care hospital or office practice.

The following points are important to remember:

- You will be working with a variety of people. You may not share the same values or beliefs but you should always be respectful of each person's individuality.

- If you are to be successful in your clinical work you have to exhibit a professional, caring and dedicated attitude towards the care you provide to patients, families and interaction with other health care personnel.

- You are a guest at the clinical affiliate. The clinical affiliates have the right to accept or reject a student, which could result in the student being delayed in a program or unable to complete the requirements for graduation.

The student is held responsible for familiarizing himself/herself with the clinical policies and procedures contained in this handbook.

The Radiologic Technology Program at Shawnee State University documents student's clinical time, evaluations, and competencies utilizing the *Trajecsys.com* web site. Occasional use of forms in a paper format may be required for clinical sites that do not have access to the internet and to rotations in advanced modalities. The clinical forms in the back of this handbook are examples of the forms on the Shawnee State University's *Trajecsys.com web pages*, some changes may be made to adapt the forms to the web pages.

SHAWNEE STATE UNIVERSITY
RADIOLOGIC TECHNOLOGY PROGRAM
FACULTY AND STAFF

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CLINICAL EDUCATION CENTERS

Clinical Site	Phone Number	Address	Clinical Instructor(s)
Adams County Regional Medical Center	937-386-3461 or 386-3462 x-ray 3460	230 Medical Center Dr. Seaman, OH 45679	Tara Applegate, RT Jessica Wamsley, RT
Adena Pike Medical Center	740-947-6530	100 Dawn Lane Waverly, OH 45690	Rachel Mootz, RT
Adena Regional Medical Center	740-779-7666	272 Hospital Road Chillicothe, OH 45601	Cheryl Martindale, RT
Highland District Hospital	937-393-6126	1275 North High Street Hillsboro, OH 45113	Tammy Hitt, RT Sarah Smith, RT
Our Lady of Bellefonte Hospital	606-833-3667	St. Christopher Drive Ashland, KY 41101	Melanie Rock, RT Leslie Stamper, RT
*Our Lady of Bellefonte Hospital, Ironton Urgent Care	740-533-3950	1015 East Ring Rd. Ironton, OH 45638	Veronica Osborne, RT
Southern Ohio Medical Center	740-356-8117	1805 27th Street Portsmouth, OH 45662	Justin Lower, RT Matt Malone, RT
*SOMC Urgent Care	740-356-7319	Waller and 18th Street Portsmouth, OH 45662	Robbie Rase, RT
VA Medical Center - Chillicothe	740-773-1141 Ext. 7739	17273 State Route 104 Chillicothe, OH 45601	Heather Needs, RT
Kings Daughters Medical Center Ohio	740-991-4000	1902 Argone Rd Portsmouth, OH 45662	Amy Murnahan, RT
Mt. Orab	397-444-4000	154 Health Partners Circle, Mt. Orab, OH 45154	JoBeth Rockey, RT Josh Kirschner, RT

* Ironton Urgent Care and SOMC Urgent Care are part of the primary rotation through the main facilities. Students rotate into the urgent care centers a week at a time.

Revised 7/13/18

CLINICAL COURSE DISCRIPTIONS

RDLT 1290 Clinical Experience 1 (2)
The first clinical course will serve as an orientation to the clinical environment including rotations through the office, transportation of patients, use of the radiographic equipment and image processing. The student will apply radiologic technology principles with emphasis on the chest, abdomen and extremity examinations at the imaging departments of affiliate hospitals. Course may include on-line x-ray critique sessions. *Fall; preq. RDLT 1101 and 1120*

RDLT 1390 Clinical Experience 2 (2)
This is course is a continuation of RDLT 1190 with practical application of radiologic technology principles and techniques with emphasis on examinations of the lower extremity, spine, bony thorax, skull, facial bones and paranasal sinuses at the imaging departments of affiliate hospitals. Course may include on-line x-ray critique sessions. *Spring; preq. RDLT 1290, 1240 and 1221*

RDLT 2190 Clinical Experience 3 (3)
Continuation of RDLT 1290 with practical application of radiologic technology principles, positioning, and techniques with emphasis on oral and vascular administration of contrast procedures, mobile and surgical radiography, pediatric and geriatric radiography, trauma radiography, and mammography. Course includes on-line quizzes that are part of the clinical grade. Course may include on-line x-ray critique sessions. *Summer; preq. RDLT 1390, 1341 and 1322*

RDLT 2290 Clinical Experience 4 (3)
Continuation of RDLT 2190 with emphasis on practical application of radiologic technology principles, positioning, and technical factors for imaging the gastrointestinal tract, portable radiography, neurologic and cardiovascular examinations and other specialized areas of medical imaging. Course may include on-line x-ray critique sessions. *Fall; preq. RDLT 2190 and 2142*

RDLT 2390 Clinical Experience 5 (3)
Continuation of RDLT 2290 with emphasis on practical application of radiologic technology principles, positioning, and techniques involving headwork, surgery, advanced radiographic examinations, and specialized areas of medical imaging. Course may include on-line x-ray critique sessions. *Spring; preq. RDLT 2290, 2260 and 2251*

Revised 07/10/2009
Reviewed 7/13/18

SHAWNEE STATE UNIVERSITY
COLLEGE OF HEALTH SCIENCES
SAFETY PROCEDURES RELATING TO A.I.D.S. AND HEPATITIS B

College of Health Sciences Employees or Students Doing Health Care Work.
This procedure has been considered and adopted in accordance with the current consensus of the medical and scientific community that bloodborne diseases cannot be transmitted by casual body contact typical of the workplace. Should it ever appear that the implementation of this procedure presents a danger to our employees or students, the College reserves the right in the sole discretion of the College to make appropriate revisions. The risk of contracting Hepatitis B is greater than the risk of contracting AIDS. Therefore, recommendation for the control of hepatitis B infection will effectively prevent the spread of AIDS. All such recommendations are therefore incorporated herein.

1. The College of Health Sciences strongly recommends that students enrolled in Health Science Programs obtain adequate medical insurance coverage.

2. It is recommended, that Radiologic Technology students be vaccinated for hepatitis B prior to contact with blood or other potentially infectious substances. If after consultation a student refuses to obtain Hepatitis B vaccination, a form entitled "Hepatitis B Vaccination Declination" must be signed.

3. Sharp items (needles, scalpel, blades, and other sharp instruments) should be considered as potentially infective and be handled with extraordinary care to prevent accidental injuries.

4. Disposable syringes and needles, scalpel blades, and other sharp items should be placed in puncture resistant containers located as close as practical to the area in which they are used. To prevent needle stick injuries, needles should NOT be recapped, purposely broken, removed from disposable syringes, or otherwise manipulated by hand unless a one-handed technique is employed.

5. When the possibility of exposure to blood or other body fluids exists, Universal Precautions must be followed. The anticipated exposure may require gloves alone, as in handling items soiled with blood or other body fluids, or may also require gowns, masks, and eye covering when performing procedures or post-mortem examinations. Hands should be washed thoroughly and immediately if they accidentally become contaminated with blood. Any occupational exposure must be reported to an appropriate university representative and an incident report filed as soon as reasonably possible.

6. To minimize the need for emergency mouth-to-mouth resuscitation, mouth-pieces, resuscitation bags, or other ventilation devices should be located and available for use in areas where the need for resuscitation is predictable.

7. Pregnant employees or students engaged in health care are not known to be at greater risk than employees or students who are not pregnant. However, if an employee or student develops infection with the AIDS virus during pregnancy, an infant has an increased risk of infection by prenatal or perinatal transmission. Because of this risk, pregnant employees or students should be especially familiar with precautions for preventing the transmission or acquisition of the AIDS virus.

8. Employees or students engaged in health care who have been diagnosed as having AIDS (T4 count < 200 cells) who are not involved in invasive procedures (those in which the body is entered, e.g., by use of a tube, needle, device, etc.) need not be restricted from work unless they have some other illness for which any health care worker would be restricted.

9. For students engaged in health care who have AIDS, there is an increased danger from infection due to diseases they may come in contact with in class or at the work place. Students with AIDS, who have defective immunity, are at risk of acquiring or experiencing serious complications of such diseases. Of particular concern is the risk of severe infection following exposure to patients with infectious diseases that are easily transmitted if appropriate precautions are not taken (e.g., tuberculosis or chicken pox). Students with AIDS will be counseled about potential risk associated with exposure to or taking care of patients with transmissible infections and should continue to follow infection control procedures to minimize their risk of exposure to other infectious agents.

10. The student's physician in conjunction with the appropriate college officials will determine on an individual basis whether the student with AIDS can adequately and safely perform patient care duties.

11. Infected neurologically handicapped employees or students who cannot control bodily secretions and students who have uncovered oozing lesions will not be permitted to participate in health care services. The determination of whether an infected employee or student should be excluded from providing health care shall be made on a case-by-case basis by the employee's or student's physician and the appropriate college official.

SHAWNEE STATE UNIVERSITY
INCIDENT REPORT FORM
FOR STUDENT EXPOSURE TO BLOOD
OR OTHER POTENTIALLY INFECTIOUS MATERIAL

Name _____ SSU I.D. Number_____

Time & Date of Exposure_____
Facility Where Exposure Occurred_____

Infection Control Officer _____Fax No_____

Supervisor_____

1. Describe the circumstances under which you were exposed to human blood or other potentially infectious material.

_____

_____

2. Indicate the type of human blood or other potentially infectious material to which you were exposed. (Check those that apply.)
   - _____ Blood
   - _____ Semen
   - _____ Vaginal secretions
   - _____ Cerebrospinal fluid
   - _____ Synovial fluid
   - _____ Pleural fluid
   - _____ Saliva from dental procedures
   - _____ Other body fluid than those listed above that contained visible blood; specify: _____
   - _____ Unidentifiable body fluid
   - _____ Other body fluid. specify: _____

3. Indicate the route(s) of your exposure: (Check those that apply.)

   - _____ Parenteral, needlestick or cut exposure
   - _____ Mucous membrane exposure; splash to the eye, mouth or nose
   - _____ Prolonged or extensive skin exposure to blood or the above mentioned body fluids.

   Was the skin chapped, abraded or afflicted with dermatitis?

4. If the Source Individual is known, provide as much information as possible, e.g. Name, Social Security number, Location, Attending Physician, etc.

_____

_____

Instructions: Notify the Dean, College of Professional Studies by telephone (740-351-3216 or 3378) and complete form and fax to 740-351-3354 or hand-deliver this incident report for immediately to the Dean, College of Professional Studies, Shawnee State University, 940 Second Street, Portsmouth, OH 45662.

Shawnee State University

STUDENT HEPATITIS B VACCINE DECLINATION

I understand that due to my educational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given information concerning the availability of the hepatitis B vaccine and the risk I take in choosing not to be vaccinated. However, I decline to obtain the hepatitis B vaccination at this time. I understand that by declining to be vaccinated, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have educational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive information on its availability.

_____
Student's Name (Please Print)

_____
Student's Signature

_____
Program of Study

_____
Date

Please indicate your reason for refusing the hepatitis B vaccine at this time:

_____ I have had the disease. (Documentation required)

_____ I was vaccinated prior to entry into SSU's program and have provided SSU with a vaccination record. (Documentation required)

_____ Medical reasons contraindicate my receipt of the vaccine. (Documentation required)

_____ Other. (Explanation required) _____

_____

_____

RADIATION PROTECTION FOR STUDENT TECHNOLOGISTS

ALARA: **A**s **L**ow **A**s **R**easonably **A**chievable: All students and faculty members should keep their own exposure as well as their patient's exposure as low as reasonably achievable. The three cardinal principles of radiation protection should be employed to protect yourself which are as follows: Time – reduce the time or length of exposure whenever possible: Distance – keep as far away from the source as possible when the x-ray tube is energized: and, Shielding – when other means of protection are not available you should wear a protective lead apron to protect yourself from scattered radiation. (Be aware that the distance factor provides the most protection for the student and faculty members.) The students need to be aware that all three cardinal principles of radiation protection cannot be utilized effectively for patients (for example you cannot limit distance when a 40 inch distance is required for a specific procedure) but you can utilize shielding and to a certain extent time. (Every time you repeat an x-ray, you are increasing the patient's length of exposure.) Fewer repeats affect the time a patient is exposed, shielding body parts not included in the area of interest, and collimating to only the area of interest employ the shielding principle of radiation protection.

The effects that may occur from exposure to ionizing radiation (x-rays) can be classified as either somatic or genetic. Somatic effects would become evident in the exposed individual. This type of effect would not be expected in individuals who work in hospitals unless there was a gross radiation accident. Genetic effects would become evident in the descendants of the exposed individual. Thus, the effects would not be present in the exposed individual but may appear in subsequent generations. If the recommendations that are outlined below were followed, it would not be expected that any worker (student) would receive enough radiation to transmit appreciable genetic mutations. Thus, it should not be assumed that any genetic defect is directly due to the exposure of a parent.

In summary, it can be said that the risk incurred as a radiographer (radiation worker) is slight and should be accepted the same way as risks to workers in other workers in other fields such as electricians, chemists, coal miners, and truck drivers. Despite the slight risk, the radiographer (student) should not allow familiarity to result in false security. All students shall abide by the following guidelines to keep their exposure as low as possible:

1. Only patients requiring a radiographic examination should be in the x-ray room.

2. The student shall be behind a protective barrier when x-rays are being generated.

3. Always wear protective apparel (lead aprons, gloves) when not behind a protective barrier. Protective aprons and gloves should not be folded sharply when not in use but hung on the appropriate hangers.

4. The holding of patients during an exposure should only be done after other measures (tape, sandbags, compression bands and commercial immobilizing devices) prove inadequate. **Students should not hold patient during any radiographic procedure. Students also must not hold image receptors during any radiographic procedures (JRCERT, 2014)**. Relatives or friends of the patient, aides, or nurses should be enlisted if holding is necessary.

5. The student operating or assisting in portable radiography (O.R.) shall **wear a protective apron and stand as far as possible from the patient**. It is the operators' responsibility to insure the proper protection of other persons in the area. Persons who do not need to be

by the patient should be asked to leave the immediate area. Those persons who must be near the patient should be provided with protective apparel.

6. For procedures such as fluoroscopy in which you cannot leave the vicinity of the patient, you shall **wear a lead apron** and try to be **at least six feet away** from the patient during activation of the x-ray beam.

7. Always wear your TLD badge in clinical or in the energized lab. The badge should be positioned outside the lead apron on the collar. Do not allow other personnel to use your badge. On a monthly basis, the badge will be exchanged for a new one. The old badge will be returned to Global Dosimetry Solutions, Inc., for processing. The results and cumulative totals are sent to the University. To keep you informed of your cumulative exposure the latest month's results will be shared with you during one of your classes for you to review and initial.

8. Your radiation monitor is your responsibility

9. Use gonadal shields on all persons when such use will not interfere with the examination.

10. Follow the appropriate policy of the clinical education center in which you are assigned concerning examinations of the pelvis and lower abdomen of women of reproductive capacity.

Previous reports are kept in the Program Chair's office. Store your TLD badge in a safe place when you are not wearing it. Keep the badge away from any heat or radiation sources. Remember to remove your badge from your lab coat or uniform before laundering it. Should you lose your badge, report this to the Program Director as soon as possible.

An investigation level of a dose equal to or greater than 100 mrem whole body dose (2 % of the annual allowable dose) in any quarter on their radiation reports will result in an investigation by the Program Leader. The investigation will be performed to address possibly poor radiation protection practices by the student. Documentation of the report will be inserted into the student's academic record.

A report will be filed with the Director of the Ohio department of health in incidents that involve exposures as stated in **General Radiation Protection Standards** Chapter 3701:1-38-21 of the Ohio Administrative Code (OAC).

SOURCES:

NCRP Report No. 105: Radiation Protection for Medical and Allied Health Personnel. October 30, 1989. Bethesda, Maryland. National Council on Radiation Protection and Measurements.

Arlene M. Adler and Richard R. Carlton (2003), Third Edition, Introduction to Radiography and Patient Care, W. B. Saunders Company, Philadelphia, PA.

JRCERT. (2014). Standards for an Accredited Educational Program in Radiography.

The above references as well as others regarding radiation protection are available for your information from the Program Director or University Library.

Pregnant Radiologic Technology Students

Student technologists who become pregnant have several options available to them. These include:

1. Continuing in the program without declaring their pregnancy.

2. Declaring their pregnancy and following the guidelines listed below.

3. Withdrawing from the program and returning the following year (if space is available).

4. Continue with the didactic courses and complete the clinical courses after the delivery (if space is available).

Student technologists who are pregnant may continue with their clinical education in the Radiologic Technology Program without modification. The pregnant student has the option of declaring their pregnancy. Completing the Declaration of Pregnancy form and giving it to the Program Director accomplishes formal declaration. This will enable additional protective measures to be offered to you. It is recommended that pregnant students do this and do it as soon as they suspect they are pregnant. The first 3 months of gestation is the most critical period for fetal development.

Choosing options 2, 3, or 4 require the student to inform the Program Director in writing of their decision.

The following guidelines shall be followed once a student has “declared” their pregnancy:

1. The pregnant student technologist shall be informed of the effects of radiation on the fetus and acceptable practices of radiation protection. The student shall sign consent acknowledging that she has received this information.

2. The pregnant student technologist will be issued a second radiation monitoring device that will be worn on the abdomen and under the protective apron. The original monitoring device will be worn in the normal location.

3. The student technologist shall wear the monitoring device(s) at all times while in a radiation environment. The monitoring device will be processed monthly.

4. During the entire gestation period, the dose equivalent limit to the embryo-fetus or the student technologist from occupational exposure will not exceed 0.5 rem (5 mSv) (NRC 10CFR20.1208)

5. The student technologist may at any time have full access to her radiation monitoring device records.

6. A student technologist who is pregnant **shall not** perform the specific duties associated with the radiographing of patients having intracavity or interstitial sources of gamma radiation (radium or cesium).

Pregnant Radiologic Technology Students (Continued)

7. A student technologist who is pregnant **shall not** hold or assist in holding a patient during a radiographic or fluoroscopic exam, nor shall the student be involved in any procedure where she may be in the direct or useful beam.

8. The pregnant student should advise her physician of her plans of continuing her clinical education and abide by his/her advice.

9. Students will be allowed to make up any missed clinical time due to pregnancy or immediate post-natal care. The student may accumulate time prior to the expected delivery date. Arrangements must be made with the clinical coordinator and the appropriate hospital personnel.

10. At any time, a student may retract their declaration of pregnancy by providing written documentation to the Program Director.

The student technologist who is pregnant will continue all other phases of her training as expected of any other student.

Radiologic Technology Program

DECLARATION OF PREGNANCY

In accordance with the NRC's regulations at 10 CFR 20.1208, "Dose to an Embryo/Fetus," I am declaring that I am pregnant. A written confirmation from their physician on the estimated date of conception and the expected delivery date is required. Students must also submit a release from their physician following delivery to return to classes and clinical.

In signing this form, it is acknowledged that:

1. I have read the information on "Pregnant Radiologic Technology Students" from the program handbook and any other material suggested by the Program Director.

2. The U.S. Nuclear Regulatory Commission's Regulatory Guide 8.13 and appendixes were presented to me both in oral and written form.

3. I understand the radiation dose to my embryo/fetus during my entire pregnancy will not be allowed to exceed 0.5 rem (5 mSv) (unless that dose has already been exceeded between the time of conception and submitting this form). I also understand that meeting the lower dose limit may require a change in clinical assignments during my pregnancy.

4. I understand that I have the right to withdraw this declaration of pregnancy if I so choose.

5. The Program Director or faculty member provided a question and answer period following the above discussion, during which my questions, if any, were satisfactorily answered.

6. I understand that I may retract this declaration by providing the request for retraction in writing to the Program Director.

Signature _____ Date _____

Print Name _____

Second Film Badge Ordered _____
Current Badge Total _____

Revised 06/26/2015
Reviewed 07/13/18

STUDENT HEALTH INSURANCE

The student is held financially responsible to provide and maintain their own health insurance. As a condition of acceptance, students are required to provide proof of health insurance to the clinical coordinator prior to the start of their clinical education. Students are financially responsible for any medical treatment they receive during their clinical training. Failure to provide and maintain health insurance coverage will result in delay of clinical education.

Revised 06/21/2017
Reviewed 07/13/18

CONFIDENTIALITY POLICY

As a Radiologic Technology student, you will come into possession of confidential demographic and medical information concerning patients and the services rendered to them at several medical centers. This information is provided to you only to facilitate your education. **You will not**, at any time during or after your education at Shawnee State, disclose any confidential information to any other person whatsoever, or permit any unauthorized person to examine or make copies of any medical reports or related documents with which you come in contact with while in the Radiologic Technology Program. This includes, but is not limited to social medial and discussions with other students in the clinical and classroom setting.

All records and personal information about patients is **absolutely confidential**. It is **imperative** that students do not divulge information about patients to anyone, including the patient. If a student is questioned by a patient about his/her examination and/or results, the patient should be referred back to their physician. Only during case presentations, conferences, department reports, or other **controlled** situations is the patient information allowed to be discussed.

As a result of the *Health Insurance Portability and Accountability Act of 1996 (HIPAA)*, federal law mandates the confidentiality of health information. This act contains penalties for wrongful disclosure of individually identifiable health information. It is important that every health care provider, including radiologic technology students, understand the rules for release of patient health information and follow the policies established by their assigned clinical site for access and release of individually identifiable health information.

As a Radiologic Technology student, you will also see and/or hear about other health care professionals (Doctors, Nurses, Radiologic Technologists, etc.) and other hospitals. Information you see and/or hear regarding these professionals or hospital should also be kept confidential.

Upon investigation by the Radiologic Technology faculty, anyone found not to be in compliance with this policy will be **DISMISSED** immediately from the program. The individual will **NEVER** be eligible in the future for readmission to the Radiologic Technology Program.

RELATIONSHIPS WITH PATIENTS

Students enrolled in this program are expected to consider their relationships with patients to be an essential element of the diagnosis and therapeutic process. Students should learn to consistently employ communication skills such as the use of open ended questions, clarification of meanings, and appropriate use of silence, empathy, summaries, and confrontations in order to enhance their effectiveness in discovering patient difficulties and to help patients cope with problems.

All patients have a right to expect courtesy, respect, and concern from students. Students should remember that illness can cause some individuals to make unreasonable demands or cause other difficulties. Self-acknowledgement of the student's negative feelings about certain patients is appropriate and desired, but students have a responsibility as professionals to remain in control of their feelings while in the presence or in earshot of patients. Students, by their manner, should try to instill confidence in themselves and in other members of the health care team, but never by attempting to bluff in areas beyond their confidence.

Failure to employ appropriate communication skills and patient relationships may result in disciplinary actions that may include, but is not limited to, incident reporting or dismissal from the radiology program.

(Taken From: **Evaluating Clinical Competence in the Health Professions**, by Morgan and Irby, p. 75)

STUDENT DRESS CODE FOR CLINICAL EDUCATION

Students shall abide by the following Dress Code at all times while participating in clinical education as part of enrollment in the Radiologic Technology Program at Shawnee State University. Students are expected to maintain a neat, clean, and professional appearance at all times. Appropriate dress will include the following:

1. **Hygiene**
   Particular attention must be paid to personal hygiene and cleanliness to help prevent and control infection. Students should bathe or shower daily, using soap. Use deodorant as necessary. Students should avoid using cologne or after shave that may induce allergic responses in patients. Hands must be clean and well-manicured at all times. Proper dental hygiene should be practiced; particular attention should be given to prevent mouth odors.
   -Acrylic or gel nail are **not** permitted during a student's clinical education.
   -Natural painted fingernails must be a light neutral color. The polish must be neat and well maintained.

2. **Hair**
   Hair must be clean and well groomed. Hair below the shoulders must be pulled up at all times, for both female and male students. Facial hair must be clean and neatly trimmed.

3. **Jewelry**
   Jewelry should be kept to a minimum. Pierced earrings must be limited to two (2) small non-dangling post types. Bracelets and rings may lead to ineffective hand washing and serve as a reservoir for bacteria and therefore should not be worn. Neck jewelry must not be worn. It is strongly suggested that students not wear necklaces while in clinical. Jewelry inserted into other areas of the body that would be visible to the patient is not allowed.

4. **Clothing**
   Uniforms must be clean and well-pressed. Navy blue scrub pants and scrub tops are to be worn by both male and female students in the clinical setting. Lab coats are recommended and should be white or navy to match the uniform. Undershirts may be navy, white or black. Stripped or multi-colored shirts are not permitted.

   For Women: White or black socks to match the shoes may be worn with the scrub pant. Undergarments must not be visible underneath a student's uniform (ie: sports bras). If undergarments are seen at the top or under the student's uniform, it is inappropriate and a violation of the dress code.

   For Men: White or black socks are to be worn that are tall enough to cover the ankle/pant hemline. Socks with colored stripes are not appropriate.

5. **Shoes**
   All white or black clinic shoes or leather athletic shoes, with laces, must be worn by both male and female students. The accent trim on the shoes must be approved. Shoes must be clean and polished. No open toe, shoes that contain holes, shoes without laces, and heel shoes are permitted.

STUDENT DRESS CODE FOR CLINICAL EDUCATION (Continued)

6. Identification

Shawnee State University identifying name tag must be worn. (Students, if employed by an affiliate hospital, shall not wear their hospital identification badge during clinical education.)

7. TLD Badge

An up-to-date personnel radiation monitoring device must be worn in the appropriate location (see radiation protection policy).

8. Gum chewing is not permitted.

9. Tattoos

All visible tattoos must be covered. Please note that some clinical sites may be more relaxed or strict with tattoos. The student is responsible for adhering to their clinical facility protocols.

Any apparel or accessory to be worn as part of the student's uniform in the clinical setting must be approved by program faculty prior to the start of the clinical education. After approval, nothing can be added or removed from the approved clinical uniform.

Students should consult with the program faculty if they have any questions regarding the dress code requirements. The decision on the appropriateness of apparel will be made by the program faculty and/or clinical instructor. If any questions arise over the appropriateness of apparel, the final decision will rest with the program faculty. Any student who is determined not to be in compliance with this dress code will receive an incident report and will be asked to leave the clinical site (program faculty will be notified by the Clinical Instructor). The student will be given and unexcused absence and required to make-up the clinical time missed.

See Incident Reporting Policy

Dress Code Approval Policy

Professionalism is a defined goal set by the Radiologic Technology Program at Shawnee State University. Professionalism begins on the first day of class and continues throughout the program, including the clinical setting. An important part of professionalism is an appropriate dress code set by Program Faculty (see dress code policy). The student will be expected to follow the dress code set forth by Program Faculty every day at the clinical setting and lab setting. To ensure the student will be dressed appropriately and professionally, Program Faculty will approve attire to be worn in the clinical setting. Upon approval, the student and Program Faculty will sign the statement that the attire was approved and the student will abide by the dress code policy. If a student is not dressed in the approve attire, the student will receive a demerit of 5 points from their clinical grade and will need to complete and **Action Plan** (see Action Plan policy). The Action Plan will need to be submitted by the student in seven (7) days for approval with signatures from both student and Program Faculty. If the Action Plan is not submitted in seven days, the student will be placed on probation and a possible dismissal from the Radiologic Technology Program.

Dress Code Approval

The student will be required to obtain dress code approval before beginning the clinical experience. Once the student has approval from Program Faculty, the student will abide the dress code at all times during the clinical experience. Any violations will result in reduction in grade (see dress code policy). Any changes in the student's attire after the approval process, will need to be approved by the Clinical Coordinator. The following are need to be approved for proper dress for clinical experience:

Dress Code Item	**Approve Y or N**
Hair	
Jewelry	
Scrubs	
Lab Coat	
Shoes	
Identification	
Film Badge location	
Tattoos (if applicable)	

Additional Items	**Approve Y or N**

By signing the statement, the student agrees to abide by the clinical handbook dress code at all times during the clinical experience. Any changes in attire will need to approve by Clinical Coordinator.

Student: _____ Date: _____

By signing the statement, Program Faculty approve attire for student for clinical experience.

Program Faculty: _____ Date: _____

CELL PHONE USE

Use of cell phones, smartwatches, tablets, or laptops at clinical sites is prohibited unless on break or at lunch. Students are assigned to the clinical sites for an educational experience. Interruption of this experience by cell phone calls or the distraction of students, patients, or staff by personal calls is unacceptable.

Any student, who is concerned about receiving emergency calls is welcome to leave the telephone number of the clinical site with family members so that they may be contacted, through the department receptionist, in the event of an emergency only.

Any student found using their cell phone, smartwatch, laptop, or other electronic device while in the clinical setting will be sent home, given an unexcused absence for the day, required to make up the time, and a written incident report will be filed.

See Incident Reporting Policy

NOTE: Cell phone use is prohibited by many health care facilities as it may interfere with selected monitoring equipment.

Revised 06/21/2017
Reviewed 7/13/18

Background Checks

The Radiologic Technology Program at Shawnee State University requires students to obtain a federal and state background check before beginning their clinical experience. Each student is responsible for payment of background checks. It is recommended this be obtained through Shawnee State University's security office. The approximate cost is $56.00. The office performs background checks Monday-Friday from 8-10am and by appointment.

Drug Testing

The Radiologic Technology Program at Shawnee State University requires all students to have annual drug testing. This consists of a **ten-panel** drug test and students are responsible for the cost of the test. The initial drug test cost is included with your CastleBranch registration fee. (See CastleBranch Policy). In addition, random drug testing may be required of any student who program faculty have suspicion or reason to believe may be utilizing recreational or illicit drugs. If a drug test is required of any suspected student, it must be obtained and results reported to program faculty within three (3) days. This will be at the student's expense. Failure of the drug test, or failure to comply or obtain the test, may result in dismissal from the program. The Radiologic Technology Program will follow the University's Drug-Free Campus and Workplace Policy, please see http://www.shawnee.edu/leadership/policies/media/policy-506r.pdf for further information.

Drug test results will be uploaded to Castlebranch, or must be emailed or faxed to program faculty or faxed to the department secretary at (740) 351-3041 with attention to the Radiologic Technology program faculty.

If a student feels they may have issues with substance abuse, or fails a drug test, they will be referred to the University Campus Counseling Office. This is a free service to students who require counseling assistance. The Campus Counseling Office is located in Hatcher Hall, 1001 4th Street, and may be reached at 740-351-3551.

CastleBranch Immunization Tracking

Shawnee State University Radiologic Technology Program uses CastleBranch to manage immunization tracking and drug testing for all students in the program. Students will upload their required clinical documentation into the system for tracking and management. This information includes, but not limited to, all immunization records, TB skin test, physicals, and other documentation and information deeded necessary by program faculty.

Students are responsible for a onetime payment of an estimated $81.00 to initialize the program. This cost includes the first drug test, and the management of all uploaded information into the system. There will be an additional cost of $40.00 for the second drug test during the students' second year of the program. Additional costs may be incurred if additional testing is required. Students will continue to have access to the site after completion of the program.

Adopted 7/13/18

CLINICAL ATTENDANCE POLICY

The Radiologic Technology Program at Shawnee State University encompasses six (6) semesters at the University. The clinical education component of the program encompasses five (5) semesters.

Students are expected to attend all clinical assignments and should arrive on time to the clinical site and be prepared to start their clinical training on time. Students are not allowed time off for vacation, elective surgeries, etc. during regularly scheduled classes or clinical time. Students will follow the University calendar regarding vacations. The University normally schedules breaks for approximately three days during the Thanksgiving Holiday and a week in March for Spring Break. The student is not required to attend clinicals during University breaks. The University observes the following holidays during the semesters: Martin Luther King, Jr. Day, Memorial Day, Independence Day, Labor Day, Veteran's Day and Thanksgiving.

The following procedures must be followed in event of an unplanned absence or tardy from your clinical assignment.

1. The Radiology Program Clinical Coordinator and Clinical Instructors of the affiliate hospitals must be notified **prior** to any absence due to tardiness or illness. Notification consists of a telephone call to the affiliate radiology department prior to the student's scheduled time of arrival and also the clinical coordinator at the University by either a phone call or e-mail. The student must contact the Clinical Instructor (or Chief Technologist and/or Staff Technologist if the Clinical Instructor is unavailable) and state the reason for the absence or tardiness. Failure to call in will result in an unexcused absence. Absences not due to illness will also be considered as unexcused absence.

   Unexcused absences are not tolerated. The receiving of one unexcused absence will lower the final clinical grade by five (5) percentage points. Two unexcused absences will lower the final clinical grade by ten (10) percentage points. Each day of unexcused absence will be considered one absence.

   Three (3) excused absences during the semester will result in the lowering of the student's final clinical grade by five (5) percentage points. Example: A student misses three (3) consecutive clinical days with the flu, the three (3) consecutive day will be considered as one excused absence if the student has notified the clinical site. Each additional absence will lower the final clinical grade by five (5) percentage points. A student may not be absent from clinical more than three (3) consecutive clinical days without a physician's excuse.

2. Tardiness in arriving for clinical education, regardless of "calling in", will result in the lowering of the student's final clinical grade five (5) percentage points for being tardy three (3) times during the semester. An additional two (2) points will be subtracted for each additional day tardy**.** Additionally, for every three (3) tardies, students will be required to attend an additional clinical day.
   Note: Special consideration will be given in cases of inclement weather.

3. All missed time (excused or unexcused) is required to be made up prior to the end of the semester. Students shall not exceed more than forty (40) hours a week in the clinical setting. Under no circumstances shall a student exceed more than forty (40) hours in the clinical setting in one week. Additionally, a student is not permitted to be in the clinical setting more than ten (10) hours a day and are not permitted to stay in clinical past 5:30pm.

CLINICAL ATTENDANCE POLICY (continued)

If the time is not made up prior to grade submission, the student will be awarded a grade of Incomplete (I) as their clinical grade until the time is completed. The student will be given the opportunity to make up the clinical time during semester breaks or the following semester with the permission of the program faculty and prior approval of the clinical instructor(s). Clinical make-up time must be performed at the facility in which the absence occurred and in the rotation that the absence occurred. Failure to make up the clinical time will result in the student receiving a failing grade and result in dismissal from the program.

4. Make up time should be performed in a minimum of two (2) hour blocks unless this amount of time would exceed forty (40) hours a week, or ten (10) hours a day, in the clinical setting. Students are not permitted to stay past 5:30pm. (If the students clinical start time is after 7:00am, not permitting the 2 hours allowed make-up time, a student may be able to being clinic early with both faculty and clinical instructor prior approval).

   Absences from clinical should be made up in the initial two (2) weeks following the absence. Clinical time can be made up Monday through Saturday at the clinical facility in which the absence occurred and only with the permission of the Clinical Instructor and notification of the Clinical Coordinator. If scheduled make-up time is not completed at that date and time, it will result in an unexcused absence. Any clinical make-up time may be completed during weekdays (preferred), Saturdays, or evenings*. Sunday, midnight shifts, or holidays when the University is closed cannot be used for make-up time*
   NOTE: Students may not exceed ten (10) hours a day or forty (40) hours of clinical time in any seven (7) day period.

5. Student's involved in extracurricular activities must make arrangements with the clinical instructor and the program faculty prior to missing the clinical time. The student is required to make-up missed clinical time but will not be penalized for the absence.

6. Each student will be given one (1) personal day each semester of clinical. Students must request to use the personal day a minimum of two (2) weeks in advance or the request will be denied. The personal day cannot be used to replace a sick day, or in place of a scheduled or planned make-up day. Near the end of the semester, the student may contact the clinical coordinator or program director regarding using a personal day in place of an absence due to illness. Only after careful consideration of the reason for the absence by the program faculty will the student be allowed to use the personal day for an absence due to illness.

   The personal day must be used for the current semester; it cannot be carried over to the next semester or banked for future use. However, if a student chooses not to use their allowed personal day, they will be given five (5) points on their lowest clinical evaluation from their clinical instructor. This extra credit opportunity will be applied to the current semester clinical grade only, not didactic grade. During the last semester of clinical education, students will **not** be permitted to take their personal day unless all competencies are complete.

   In addition, if a student has received demerits, lost clinical grade points, or received an incident report, they will not be awarded the bonus points from the unused personal day.

7. Emergencies serve as exceptions to the above policy and are at the discretion of the program faculty only. Students must notify the program faculty as soon as possible in the event of an emergency.

TRAJECSYS/CLINICAL ATTENDANCE RECORDS

Shawnee State University Radiology Program utilizes Trajecsys © reporting system for the online clinical record and evaluation system. Students are responsible for the cost of this program. It is a one-time fee of $150.00 made to Trajecsys and must be paid prior to the beginning of the students second semester.

Clinical attendance is monitored on the Trajecsys.com web site and requires the students to log in and out each day at the clinical site. The Trajecsys.com record documents the precise clock in and out time and identifies the student is at the appropriate clinical site. Each student must have their attendance approved by their Clinical Instructor approximately once a week.

Students who do not have access to the internet at the clinical site must log their attendance on a clinical attendance record form and require a registered technologist to initial the log in and out time. Clinical Instructor's signatures are required at the bottom of the clinical attendance record prior to turning them in to the clinical coordinator. The signature of the clinical instructor verifies that they have reviewed the clinical attendance record.

Students are not permitted to clock in/out of clinical on their cell phone. Using a cell phone will result an incident report and the loss of 5% points from the student's clinical grade.

An example of the Clinical Attendance Record will be provided by the clinical coordinator of the program.

CLINICAL RECORDS

All clinical records are considered part of the student's academic record and are used to calculate the student's grade for clinical performance. This makes all documentation of clinical performance (including competency evaluations, clinical instructor's evaluations, and clinical time sheets) subject to the same regulations as grades awarded on campus for individual classes. Student's alteration or falsification of any of the information on the *Trajecsys.com* web site or on paper clinical forms are considered by the program faculty to be academic misconduct and will result in dismissal from the Radiologic Technology Program at Shawnee State University. It also may result in dismissal from the University.

Please review the "Academic Misconduct" policy in the Radiologic Technology Program Handbook or online in the Shawnee State University Student Handbook for information regarding the University's regulations in regard to Academic Misconduct.

CLINICAL SUPERVISION

Students in the clinical setting are observed by a variety of health care professionals during their training, but they are specifically required to have two types of supervision by registered radiographers. The two types of supervision are as follows:

DIRECT SUPERVISION
Direct supervision insures a registered radiographer is present in the room, observing the student while he/she performs the imaging examination. This type of supervision is required on any imaging procedure in which the student has not proven competence in performing, any repeat of an unsatisfactory radiograph (regardless of the reason for the repeat), and during operation by the student of fluoroscopic equipment (See below).

INDIRECT SUPERVISION
Indirect supervision requires a registered radiographer be immediately available during the student's performance of the imaging examination. This type of supervision is required when a student has proven competency on an examination and the competency has been documented by either a mandatory or standard competency evaluation.

For example: A registered radiographer can be in an adjacent imaging suite or, on portable examinations, the radiographer must accompany the student to the patient's floor and be immediately available should the student require assistance.

Note: Students should never be alone in the radiology department without supervision by a registered radiographer.

Supervision of Students During Fluoroscopic Examinations

During the course of the program students are required to perform competency examination involving fluoroscopy. As part of a fluoroscopic examination, some clinical facilities may require the student to operate fluoroscopic equipment. Please be aware that the following policy applies to operating fluoroscopic equipment.

1. Students should not operate any type of fluoroscopic equipment when patients or any human subject is involved unless directly supervised by a registered radiographer or radiologist who is present in the room.

2. Students should never use fluoroscopy to aid in positioning a patient for any radiographic or fluoroscopic examination.

COMPETENCY BASED CLINICAL EDUCATION

The implementation of a competency based evaluation system conducted with a series of planned clinical rotations that provide a standardized format for evaluation of the student in the clinical setting. In addition, the system is designed to allow each student to progress at an individual rate consistent with the student's abilities, knowledge and motivation provided that the student meets consistent, minimum, performance standards established to demonstrate satisfactory progress through clinical education.

The didactic (classroom) and laboratory aspects of the curriculum have been well integrated with clinical assignments to allow each student the opportunity to achieve program goals and objectives in the optimum manner. Concurrent conduction of didactic and clinical experiences allows students to apply classroom and laboratory principles to the clinical situation in a systematic and organized manner. To achieve a meaningful and productive clinical participation, the student is provided with behavioral objectives which specify desired behaviors to be met in each area of instruction. As the student masters didactic and laboratory objectives, the student applies these principles in the clinical setting, guided by the objectives for clinical education.

ATTAINMENT OF CLINICAL COMPETENCY

The student begins the clinical experience by observing and assisting the registered staff technologists in the performance of radiographic examinations. This experience serves to familiarize the student with the care and radiography of patients for a given exam. Once the student masters the exam as taught in radiographic positioning classes, the student moves from a passive role to one of active participation, thus gaining "hands on" experience under the **direct supervision*** of a registered Radiographer.

The performance of a student on a radiographic examination cannot be assessed until the material concerning the examination was presented to the student in the classroom/laboratory setting. However, the student may assist the Radiographer with any examination in the clinical setting.

CLINICAL GRADING

It is the student's responsibility to meet all of the criteria outlined in the handbook for the clinical education courses in order to receive passing grades in those courses.

One criterion is the successful completion of the required number of radiographic examinations per semester. This consists of evaluations of the student's performance on Mandatory Competency Evaluations and Standard Evaluations. The forms will be supplied by the program. They must be completed by the student, the clinical instructor performing the mandatory clinical evaluation, and the registered Radiographer performing the standard evaluation. It is the student's responsibility to maintain a record of the number and type of evaluations received to satisfy the semester requirements. The overall average of the criteria on the Mandatory Competency Form must be eighty per cent (80%) or better and have no zero ratings to be considered satisfactory. If an unsatisfactory evaluation is received, the student must be re-assessed.

CLINICAL GRADING (Continued)

After satisfactory completion of the Evaluation on a radiographic examination(s), the student may then perform that examination(s) under **Indirect Supervision****. Until the Evaluation is completed, students must perform all radiographic examinations under **Direct Supervision***. A repeat of any image requires **Direct Supervision*.** All examination requiring the student to operate fluoroscopic equipment require **Direct Supervision***.

A registered radiologic technologist must check and approve all radiographs taken by a student, regardless of whether the student performed the examinations under direct or indirect supervision.

Students must perform all repeat radiographic examinations under the direct supervision of a registered radiologic technologist. Students repeating a radiograph, for any reason, must identify the examination in their patient log book as a repeat and are required to have the registered radiographer who observed the repeat exam to initial the log entry. The repeat exam must also be logged in the trajecsys.com website. (See Repeat Examination Log Policy and additional information under "Additional Requirements" #5)

Students who consistently fail to maintain competent in performing a specific radiographic exam may lose that competency if the Clinical Instructor feels they have failed to remain proficient. The Clinical Instructor must fill out the Failure to Maintain Competency form and the student must perform the exam under **Direct Supervision* ,** until they repeat the competency without error under observation by their clinical instructor. Failure to meet the required number of competencies for the semester will result in a lower clinical grade. Failure to meet the required number of competencies for two consecutive semesters will result in the probation for the student. Failure to complete all the requirements (including the two previous competencies requirements) and the current semester will result in dismissal from the Radiologic Technology Program.

In addition to the aforementioned items, the student will be evaluated by the clinical instructor and program faculty at regular intervals during each clinical course. Students must earn satisfactory ratings on the "Clinical Performance Evaluations" in order to meet the minimal requirements for each clinical course.

All materials must be received by the clinical coordinator before the last day of the semester in order to be credited to the student's grade for that clinical course.

***DIRECT SUPERVISION** requires a registered radiographer must be present, observing the student perform the imaging examination.

****INDIRECT SUPERVISION** requires a registered radiographer be immediately available during the student's performance of the imaging examination. Example: Radiographer can be in an adjacent imaging suite or, on portable examinations, the radiographer must accompany the student to the patient's floor and be immediately available should the student require assistance.

Daily Log

Students are required to keep a daily log of examinations performed in the clinical setting (mandatory competency evaluations, standard evaluations and indirect supervised examinations only). The log shall include the date of the examination and the procedure performed (Trajecsys® Daily Log). This will be checked weekly by program faculty. Failure to maintain a Daily Log of examinations will result in lowering the final clinical grade by 2 percentage points.

Repeat Examination Log

Any imaging examination requiring a repeat x-ray to be performed will require the student to identify the examination and the registered radiographer who **directly supervised** the repeat must sign the log entry. **Additionally, repeat exams must also be logged in the trajecsys.com website.** Failure to keep the log, or to produce the log when asked to in the clinical setting by program faculty, will result in a lowering of the final clinical grade by 2 percentage points and an incident report.

SEMESTER REQUIREMENTS FOR CLINICAL EDUCATION
FIRST YEAR

FALL SEMESTER 2018 - RDLT-1290

1. Attendance at all clinical sessions.
2. Satisfactory completion of Competency Unit 1.
3. Satisfactory completion of six (6) mandatory competency evaluations.* (After coverage in class and lab practicum).
4. Three (3) Clinical Performance Evaluation from the Clinical Instructor.
5. One (1) Procedural Evaluations by Program Faculty in the clinical setting

SPRING SEMESTER 2019 - RDLT -1390

1. Attendance at all clinical sessions.
2. Satisfactory completion of Eight (8) mandatory competency evaluations.* (After coverage in class and lab practicum.)
3. Satisfactory completion of Four (4) standard evaluations.* (After coverage in class and lab practicum.)
4. Three (3) Clinical Performance Evaluations from the Clinical Instructor.
5. Two (2) Procedural Evaluations by Program Faculty in the clinical setting.
6. One (1) Clinical Performance Evaluation from the program faculty.

Mandatory Competency Units 2 and 3 should be completed by the end of the semester.

SECOND YEAR

SUMMER SEMESTER 2019 - RDLT 2190

1. Attendance at all Clinical sessions.
6. Satisfactory completion of Ten (10) mandatory competency evaluations.*
7. Satisfactory completion of Five (5) standard evaluations.*
4. Two (2) Clinical Performance Evaluations from the Clinical Instructor.
5. Biweekly quizzes on Blackboard. **
6. Two (2) Procedural Evaluations by Program Faculty in the clinical setting.

Procedures from all Mandatory and Standard Competency Units may be completed with appropriate direct or indirect supervision.

SECOND YEAR (Continued)

FALL SEMESTER 2019 - RDLT 2290

1. Attendance at all clinical sessions.

2. Satisfactory completion of Eight (8) mandatory competency evaluations.***

3. Satisfactory completion of Five (5) standard evaluations.*

4. Two (2) Clinical Performance Evaluations from the Clinical Instructor.

5. One (1) Clinical Performance Evaluation from the program faculty.

6. Two (2) Procedural Evaluations by Program Faculty in the clinical setting.

7. Students can begin rotations through the radiographic specialty areas. Students must spend a minimum of one clinical day in each of the following specialty areas prior to graduation.
    a. Computed Tomography
    b. Sonography
    c. Radiation Therapy
    d. Magnetic Resonance Imaging
    e. Nuclear Medicine

SPRING SEMESTER 2020 - RDLT 2390

1. Attendance at all clinical sessions.

2. Satisfactory completion of Five (5) mandatory competency evaluations.*

3. Satisfactory completion of Four (4) standard evaluations.*

4. Two (2) Clinical Performance Evaluations from the Clinical Instructor.

5. One (1) Clinical Performance Evaluation from the program faculty.

6. Two (2) Procedural Evaluations by Program Faculty in the clinical setting.

7. Student must complete an evening rotation through the radiology department. This is to be a minimum of one clinical day during the hours of 12:30pm-9:00pm scheduled and approved by the clinical instructor. This must be completed prior to graduation.

8. Students must complete rotations through the radiographic specialty areas. Students must spend a minimum of one clinical day in each of the following specialty areas prior to graduation.
    a. Computed Tomography
    b. Sonography
    c. Radiation Therapy
    d. Magnetic Resonance Imaging
    e. Nuclear Medicine

Students must demonstrate competence in all 6 patient care activities listed, in a**ll 37 procedures identified as mandatory**, **and 18 of the 34 standard procedures**. Students must perform at least **one of the 18 standard procedures from the head section**. Students **must also perform two standard fluoroscopy procedures -including an upper GI or barium enema, plus one other standard from the fluoroscopy section as a part of the 18 standards.** All procedures must be performed under direct supervision and documented by the clinical instructor. These must be completed by the end of Spring semester 2020.

* Failure to complete the required number of mandatory competency procedures and standard procedures each semester will result in a lowering of the competency unit evaluation component of the clinical grade by the percentage of units uncompleted.

** Clinical quizzes biweekly on Blackboard during Summer Semester RDLT-2190 should be used as a review of previous course materials. Failure to receive an average clinical grade of 80% or higher in your clinical performance scores will result in no credit issued in this course for the Blackboard quizzes.

*** All Surgery competencies must be completed by the end of fall semester of the students' second year. This is due to the completion of modality rotations, evening shift rotation, and necessary clinical site placements required prior to the students' final clinical semester. Failure to complete the required mandatory surgical competencies will affect the student's grade, clinical placement and graduation status.

Clinical Education Grading Policy

RDLT Clinical Courses: 1290, 1390, 2190, 2290, and 2390

Criteria	**Points**
• Mandatory Competency Evaluations	10
• Standard Evaluations (after first fall semester)*	5*
• Clinical Performance Evaluations:	
1. From the Clinical Instructors	
a. Midterm Evaluation	20
b. Final Evaluation	20
2. From the Program Faculty**	10**
○ Not performed in RDLT 1290	
○ Clinical Quizzes (RDLT-2190) replace	
• Two Journal Entries each semester (after first fall semester) *	10*
• Procedural Evaluations ○ 2 performed each semester (1 for RDLT 1290)	30
Total Points	65 105*

Students must maintain a 75% average in both their clinical and didactic grades. Failure to maintain a 75% or greater average will result in dismissal from the program.

* No standard evaluations required during RDLT-1290 (First Clinical Semester).
*Journal entries not required for RDLT-1290.

**Clinical quizzes biweekly on Blackboard during Summer Semester RDLT-2190 should be used as a review of previous course materials. Failure to receive an average clinical grade of 80% or higher in your clinical performance scores will result in no credit issued in this course for the Blackboard quizzes.

***Updated, Addendum provided 8/2019

Revised 06/2019

COMPETENCY EXAMINATION COMPLETION

Students are required to complete both Mandatory and Standard Competency Evaluation in the clinical environment. Most of the procedures listed on the Mandatory and Standard Check-off list require the student to first observe, then assist with the procedure prior to having the Clinical Instructor document the student competent to perform the procedure with indirect supervision. The Check-off list requires the student to date the assist, observation, and competency completion. When the competency is completed, the Clinical Instructor should evaluate the procedure on the *Trajecsys.com* web site or on the appropriate form.

Mandatory Competency Evaluations:
The student is required to complete an assigned number of radiographic examinations for mandatory competency evaluation each semester **under the direct observation of the Clinical Instructor or the Program Faculty**. (Refer to the Semester Requirements for Clinical Education section for requirements.) Mandatory competency evaluations are graded on a pass/fail basis. If the student repeats any part of the imaging procedure due to the student's error, the competency evaluation should be considered a failure and documented as such on the mandatory competency form. The student must repeat the mandatory competency procedure without error at a later date. Receiving two or more failures on Mandatory Competency Evaluations will lower the student's final clinical grade by five (5) percentage points. Each additional failure will lower the clinical grade by five (5) percentage points each.

Standard Evaluations:
The student is also required to complete a required number of standard evaluations each semester (except during the clinical component of RDLT 1290). The standard evaluation examinations can be completed **under the direct observation of a Registered Radiographer** in the clinical setting. Standard evaluations are evaluated on a pass/fail basis. If the student must repeat any part of the examination due to student error the evaluation will be considered a failure. The student must repeat the examination at a later date. Receiving three (3) failures on standard evaluations during the quarter will lower the final clinical grade by five (5) percentage points. Each additional failure will lower the clinical grade an additional five (5) percentage points.

If the student completes more than the required number of exams during a semester, the extra exams will be credited toward the requirement for the following semester.

Simulated Examinations:
A student may perform a radiographic examination for competency evaluation under simulated conditions using a "mock" patient. Simulated examinations will be performed only for those exams that may not be available to the student in the clinical setting. A limit of two (2) simulations may be performed in Spring Semester 2020 prior to graduation. To arrange a simulated exam for competency evaluation, the student must contact the clinical coordinator.

Simulated radiographic exams may be performed in the radiology department where the student is assigned or in the lab at the University. Simulated radiographic exams must be performed by the program faculty. If a student has not completed all competency evaluations and must perform a simulation, he/she will not be permitted to use their personal day.

CLINICAL PERFORMANCE EVALUATION First Year (RDLT 1290 & 1390)

This evaluation will be used to assess the overall performance of a student in clinical education during the first clinical experience semester A maximum grade of 60 points can be awarded during each evaluation, with a total of 120 points for the semester. Students are expected to review evaluations from clinical instructors for areas of improvement. Evaluations are conducted by clinical instructors at affiliated facilities.

CLINICAL PERFORMANCE EVALUATION SECOND YEAR (RDLT 2190)

This evaluation will be used to assess the overall performance of a student in clinical education during the first clinical experience semester A maximum grade of 70 points can be awarded during each evaluation, with a total of 140 points for the semester. Students are expected to review evaluations from clinical instructors for areas of improvement. Evaluations are conducted by clinical instructors at affiliated facilities.

CLINICAL PERFORMANCE EVALUATION SECOND YEAR (RDLT 2290 and 2390)

This evaluation will be used to assess the overall performance of a student in clinical education during the first clinical experience semester A maximum grade of 70 points can be awarded during each evaluation, with a total of 140 points for the semester. Students are expected to review evaluations from clinical instructors for areas of improvement. Evaluations are conducted by clinical instructors at affiliated facilities.

PROGRAM FACULTY CLINICAL PERFORMANCE EVALUATION

One Clinical Performance Evaluation will be completed at the end of all RDLT clinical courses by the program faculty. Each evaluation is worth a maximum of 45-50 points. Students are expected to review evaluations each semester and look for opportunities for improvement.

PROCEDURAL EVALUATIONS

Each student will be evaluated by the **Program Faculty** while performing radiographic imaging procedures during all clinical courses. Examinations will be chosen by the faculty and will be on exams that the student has already completed for mandatory competency evaluation or standard competency evaluation. An eighty percent (80%) average on each procedural evaluation is necessary to pass the examination. Failure to pass the procedural examination requires the student to perform the same examination at another time. The average of the scores must be equal to or greater than 80%.

Procedural evaluations will be averaged together and will account for thirty percent (30%) of the student's clinical grade. Located at end of handbook.

****Updated, Addendum provided 5/2019

Revised 12/2018
Reviewed 5/2019

ADDITIONAL REQUIREMENTS

Students may receive a LOWER grade for a clinical course if they fail to meet these additional requirements.

1. TLD badges must be changed on a monthly basis. Two (2) percentage points will be deducted from the student's final clinical grade for each month during the semester that the badge is not changed within three clinical days of the date on the badge insert. The only exception is when the date of change occurs during breaks periods, the TDL badge insert should be replaced within the first three (3) clinical days of the following the return to classes on campus.

   Part of the student's responsibility is maintaining their radiation monitor. Failure to maintain control of your radiation dosimeter or loss of your radiation dosimeter will result in 5 points from your final clinical grade each time for each loss or your personal radiation monitor.

2. Students must adhere to the procedure outlined in the clinical Attendance Policy regarding absences from clinical education, as well as all other policies and procedures as stated in this handbook.

3. Students must also participate in clinical activities, such as x-ray critiques, review sessions, case presentations, additional labs, etc., as assigned by the program faculty or clinical instructors. Five (5) percentage points will be deducted from the student's final clinical grade for failing to participate in these activities.

4. Students are provided anatomic side markers with their initials on them. It is a requirement of the program for the student to keep track of these markers and have them in their possession at all times in their assigned clinical affiliate. Loss of a marker, without promptly requesting a substitute, will result in the lowering of the student's clinical grade by five (5) percentage points.

Incident Reporting

To ensure the safety of our students, patients and hospital staff the Radiologic Technology Program uses forms to report incidents that may occur at the University or within its clinical affiliates. The incident reporting forms are located in the clinical handbook and available to the student at the beginning of their clinical experience.
The following are incident reports available:

- **Incident Report**
- **Critical Incident Report**
- **Action Plan**

The **Incident Report** and **Critical Incident Report** encompass events that could occur within the University or clinical setting. The report that will be completed, will be based on the severity of the event and left to the discretion of the Program Faculty and/or Clinical Instructor. If an incident occurs, an **Incident Report** or **Critical Incident Report** will be completed which includes a description of the event. Students may make comments about the incident on the report and signatures from Program Faculty/Clinical Instructor and the student are required. Program Faculty may also require an **Action Plan** (see description) which will be indicated at the bottom of the form.

The events leading to an **Incident Report** may include, but are not limited to the following:

Excessive tardiness
Excessive absenteeism
Dress code violations
Integrity/Insubordination
Technical/Communication skills
*Academic misconduct
*HIPAA violations
*Patient Safety

A **Critical Incident Report** may result in automatic dismissal from the Radiologic Technology Program. The events leading to a **Critical Incident Report** may include, but are not limited to the following:

Academic misconduct
HIPAA violations
Patient Safety
Drug test failure

*Incident reporting is based on the discretion of Program Faculty. These events may lead to further disciplinary action, including probation or dismissal from the Radiologic Technology Program.

Incident Reporting (Continued)

Following an Incident Report or Critical Incident Report, an **Action Plan** will be indicated at the bottom of the incident report if deemed necessary by Program Faculty. The action plan should describe the student's plan of action that will rectify the event/behavior that led to the incident report. The student should be specific in his/her plan of action to ensure the event/behavior does not occur again. The student and Program Faculty will provide signatures to indicate completion.

If an action plan is required, the student has seven (7) to complete the action plan and return to Program Faculty. If the action plan is not submitted or submitted late, the student will be put on probation and will still be required to complete the action plan in an additional seven (7) days. If the student fails to complete the required action plan within the given fourteen (14) days, the student will be dismissed from the Radiologic Technology Program.

If a student receives three **Incident Reports** during the didactic, lab or clinical education it will lead to dismissal from the Radiologic Technology Program. In addition, if the student receives one, maximum two **Critical Incident Reports**, he/she could be automatically be dismissed from the Radiologic Technology Program (discretion of Program Faculty).

Clinical Experience Advising

Clinical Experience Advising is separate from Program advising. Clinical Experience Advising will be deemed necessary from Program Faculty if the student is not progressing adequately for program completion. The Clinical Experience Advising Report will be completed by Program Faculty that will provide goal(s) and objectives for the student to improve technical or behavioral skills to continue in the Radiologic Technology Program. Program Faculty will also make recommendations to the student based on the advising need. Students will need to provide an action plan within seven (7) days of receiving the advising sheet that will outline how the student will obtain the goal(s) set by Program Faculty. If the action plan is not submitted on time, the student will be placed on probation and will still need to complete the action plan or face dismissal from the Radiologic Technology Program. The student and Faculty member will sign the Clinical Experience Advising Report to the complete the process and the report will be placed in the student's file.

COMPETENCY UNITS

Competency Unit - 1 - Radiology Orientation

Following the completion of this unit, the student will be able to demonstrate competent performance in the following areas: computed radiography/radiographic darkroom, office, transportation, and radiographic room.

The main objective of Competency Unit 1 is to orient the student to the different areas of the radiology department.

The student will spend a minimum of eight (8) hours of clinical education in each of these areas. Upon completion of each rotation, the student will be evaluated on his/her knowledge of the following objectives using the appropriate checklist in the *Trajecsys.com* web site or on a paper checklist supplied by the program.

A Digital/Computed Radiography
The student will be able to fulfill all parts of the checklist associated with this competency and turn it in to the clinical coordinator.

C. Office
The student will be able to fulfill all parts of the checklist associated with this competency and turn it In to the clinical coordinator.

D. Transportation
The student will be able to fulfill all parts of the checklist associated with this competency and turn it in to the clinical coordinator.

E. Radiographic Equipment
The student will be able to correctly identify and/or operate the radiographic equipment to include:

1. Properly turning x-ray machine on/off.
2. Setting exposure factors: mA, time, kV, AEC.
3. Operating all tabletop controls and tube locks.
4. Changing image receptors in the Bucky tray.
5. Collimation devices.

Turn in to the clinical coordinator the "Radiographic Equipment Checklist".

Performance Objective

For mandatory competency Units 2 through 8, the student will be able to fulfill all of the Enabling Objectives (1-10) that apply and turn in to the clinical coordinator a satisfactory evaluation from the Clinical Instructor for the mandatory competency examination. Standard evaluations may be documented by Registered Radiographer on the clinical staff.

Competency Units 2-8

Students must demonstrate competence in all 6 patient care activities listed in the Competency Evaluation Checklist, in all 37 procedures identified as mandatory, and 18 of the 34 standard procedures. Students must perform at least **one** of the 18 standard procedures from the head section. Students must also perform **two** standard fluoroscopy procedures - including an upper GI **or** barium enema, plus one other standard from the fluoroscopy section as a part of the 18 standards. All procedures must be performed under direct supervision and documented by the Clincal Instructor.

Mandatory and Standard Competency Evaluations may only be completed following coverage of the procedure/topic in class and after the lab practicum. All required number of evaluations must be completed prior to graduation.

CLINICAL OBJECTIVES FOR EVENING ROTATIONS

The intent of scheduling students for an evening rotation is to provide learning experiences and opportunities not readily available during regularly scheduled clinical hours. For example, students are more likely to play an involved role in the radiography of traumatized patients during an evening rotation. Such experience serves to increase the student's sense of responsibility and self-confidence.

Evening rotations can enhance and complement clinical instruction and serve as an important complement clinical instruction and serve as an important component of the curriculum. Therefore, the general objectives for evening rotations are as follows:

1. Acquaint the student in a more direct role with the care, handling and radiography of traumatized or other non-routine patients.

2. Learn to work quickly and efficiently when dealing with emergency cases.

3. Utilize good judgment and adaptability in performing procedures on difficult patients.

4. Gain more experience in critiquing radiographs and determining whether they are diagnostically acceptable.

5. Learn to work well with different employees and supervisors.

6. Increase student confidence in their abilities to perform all radiographic procedures.

GUIDELINES FOR EVENING ROTATIONS

An evening rotation must be completed during the students' last clinical semester, RDLT 2390.

1. Hours for evening rotations will be **1:30p.m.-9:00 p.m.**

2. Only one student per hospital will be assigned on evenings each day.

3. Evening rotations will be scheduled by the clinical instructor of each affiliate after consultation with the clinical coordinator.

4. A minimum of one evening rotation must be completed prior to graduation.

ARRT® Honor Code Violations

Have you ever been suspended, dismissed, or expelled from an educational program that you have attended in order to meet ARRT certification requirements?

This is a question every primary-pathway candidate for certification must answer on the application, in addition to reading and signing the "Written Consent under FERPA," which allows ARRT to obtain specific parts of their educational records concerning violations to an honor code. If a student has ever been suspended, dismissed, or expelled from an educational program attended in order to meet ARRT certification requirements, he or she should answer "Yes" to the question above and include an explanation and documentation of the situation with the completed application for certification.

A list of some of the violations ARRT is concerned about is provided below, but when in doubt contact the ARRT Ethics Requirements Department at (651) 687-0048, ext. 8580.

Reportable Honor Code Violations

Note: this list does not include all reportable infractions. If you are unsure of whether something should be reported, contact a member of the Ethics staff at (651) 687-0048, ext. 8580.

- Cheating and/or plagiarism;
- Falsification of eligibility requirements (e.g., clinical competency information);
- Forgery or alteration of any document related to qualifications or patient care;
- Abuse, neglect, or abandonment of patients;
- Sexual contact without consent or harassment to any member of the community, including patients;
- Conduct that is seriously obscene or offensive;
- Practicing in an unsafe manner or outside the scope of professional training;
- Violating patient confidentiality (HIPAA);
- Attempted or actual theft of any item not belonging to the student (including patients' property); and/or
- Attending class or clinical setting while under the influence of alcohol, drugs, or other substances.

ARRT CODE OF ETHICS

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

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

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

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

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

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

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

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

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

9. The radiologic technologist respects confidences entrusted in the course of professional practice, respects the patient's right to privacy, and reveals confidential information only as required by law or to protect the welfare of the individual or the community.

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

Published: August 1, 2010, Reviewed at SSU 07/13/18

CLINICAL FORMS AND INSTRUCTIONS SECTION

Student Name: _____
Radiologic Technology Program Clinical Affiliate (if applicable): _____

Incident Report

Incident Note:

_____

_____

_____

_____

_____

_____

_____

_____

_____

Student Comments (if any):

_____

_____

_____

_____

_____

_____

Program Faculty: _____ Date: _____

Student: _____ Date: _____

This section to be completed by program faculty:

Action Plan required: Y or N

- If yes, action plan must be submitted by student within seven days of date of incident.

Action Plan submitted on time: Y or N

Student Name: _____
Radiologic Technology Program Clinical Affiliate: _____

Critical Incident Report

Incident Description (Clinical Instructor):

_____

_____

_____

_____

_____

_____

_____

_____

Program Faculty Recommendation:

_____

_____

_____

Student Remarks:

_____

_____

_____

Clinical Instructor: _____ Date: _____

Program Faculty: _____ Date: _____

Student: _____ Date: _____

This section to be completed by program faculty:

Action Plan required: Y or N

- If yes, action plan must be submitted by student within seven days of date of incident.

Action Plan submitted on time: Y or N

Student Name: _____
Radiologic Technology Program Clinical Affiliate (if applicable): _____

Action Plan

Incident Date: _____

Please describe in your words, your intended plan of action to improvement the technical skills or behavior described in the incident report.

_____

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Student: _____ Date: _____

Program Faculty: _____ Date: _____

Student Name: _____
Radiologic Technology Program Clinical affiliate (if applicable): _____

Clinical Experience Advising Report

Goal:

_____

_____

_____

_____

Objectives:

_____

_____

_____

_____

Program Faculty Recommendation for Student Resources:

_____

_____

_____

Student Action Plan for Improvement:

_____

_____

_____

_____

_____

Program Faculty: _____ Date: _____

Student: _____ Date: _____

Action plan to be submitted within seven days of the advising session.

This section to be completed by program faculty:

Action Plan submitted on time: Y or N

STUDENT EVALUATION OF CLINICAL INSTRUCTION

At the end of each semester, students will have the opportunity to evaluate their experiences in clinical education by completing the “Student Evaluation of Clinical Instruction” form provided by the program at the end of the term. The form will be on-line on the Trajecsys.com web site. Students are urged to be objective while completing the form and provide as many written comments where applicable and be aware that your Clinical Instructor will have access to the evaluation.

The “Student Evaluation of Clinical Instruction” form is to provide the affiliate radiology department and the program faculty with feedback from the students on areas where clinical education may be improved. Evaluations are required by students at the end of each semester. This must be completed before the final clinical grade will be released.

An example of the “Student Evaluation of Clinical Instruction” form follows on the next page.

Revised 07/21/13
Reviewed 07/13/18

STUDENT EVALUATION OF CLINICAL INSTRUCTION

Clinical Affiliate_____ Semester/Year _____

Class Standing _____ First Year Student _____ Second Year Student

Use the following code to respond to each of the following statements concerning the clinical education rotation.

SA	--	Strongly Agree
A	--	Agree
D	--	Disagree
SD	--	Strongly Disagree
N	--	No basis to judge

SA A D SD N 1. The clinical instructor was receptive to the student's questions.

SA A D SD N 2. The staff technologists were receptive to the student's questions.

SA A D SD N 3. The clinical instructor displayed a good grasp of the subject matter and the clinical application of such.

SA A D SD N 4. A radiologist was willing to answer student questions.

SA A D SD N 5. The technologists attempted to give each student an opportunity to perform examinations.

SA A D SD N 6. Technologists review the request for the radiographic examination to determine if you are able to perform the examination.

SA A D SD N 7. Technologists are present in the room with you when repeat radiographic examinations are performed.

SA A D SD N 8. Students were given the opportunity to complete the competency units needed for the quarter.

SA A D SD N 9. The competency units gave the student an understanding of what was expected in the clinical experience.

SA A D SD N 10. The student attempted to achieve all the competency units for this clinical course.

SA A D SD N 11. X-ray critiques and/or review sessions were a part of the clinical experience.

SA A D SD N 12. If the students needed assistance, he/she received assistance promptly by the staff.

SA A D SD N 13. The clinical instructor was interested in providing the student with instruction.

SA A D SD N 14. The staff technologists were interested in providing the student with instruction.

PLEASE MAKE COMMENTS ON BACK OF FORM

Comments: Please honestly comment on your clinical experience in regard to its structure, value, faults, and suggestions.

MANDATORY COMPETENCY EVALUATION

The student is required to complete an assigned number of radiographic examinations for mandatory competency evaluation each semester **under the direct observation of the Clinical Instructor or the Program Faculty**. (Refer to the Semester Requirements for Clinical Education sections for requirements.) If the student repeats any part of the imaging procedure due to the student's error, the competency evaluation should be considered a failure and documented as such on the mandatory competency form. The student must repeat the mandatory competency procedure without error at a later date.

Receiving two or more failures on Mandatory Competency Evaluations will lower the students final clinical grade by five (5) percentage points. Each additional failure will lower the clinical grade by five (5) percentage points each.

Shawnee State University
Radiologic Technology Program

MANDATORY COMPETENCY EVALUATION FORM

Student_____ Date_____ Patient ID Number_____

DIRECTIONS: Evaluate the student's performance according to the following criteria. Consideration should be given to the student's level of education and experience.

Criteria: Descriptions for each criteria are located on the back of this form.
Please note that a 4-Competent is considered a 100%-A score for any and all competencies.

5 = Exceeds Expectations (use for second year only, only if performance does exceed expectations)
4 = Competent (use for performance that is expected for a student in their experience level, i.e. 1st or 2nd year)
3 = Weak
2 = Very Weak
1 = Unacceptable
NA = Not Applicable

Exam: _____

Patient Condition:
1. Ambulatory
2. Fair
3. Poor
4. Serious
5. Critical

Projections:
A_____
B_____
C_____
D_____
E_____
F_____

1. Patient Care and Handling							
	A	B	C	D	E	F	Comments
2. Patient Instructions							
3. Correct Positioning of Part							
4. Correct Tube/Patient/IR Alignment							
5. Positioning Planes Used Correctly							
6. Equipment Manipulation							
7. Collimation							
8. Uses Appropriate Shielding							
9. Work Efficiency							

Image Evaluation

1. Anatomy Demonstrated and Centered							
2. Diagnostic Technique Demonstrated							
3. Patient Information/ Markers Visible							
4. Student Identification of Radiographs							

General Comments, Observations, Suggestions:

EVALUATION CRITERIA

5- Student performance Exceeds Expectations

- Student performed task with comfort, confidence and knowledge comparable to an entry-level radiographer.

4- Student performance demonstrates Competence

- Student performed task correctly, with no assistance of the evaluator. Task was completed with appropriate knowledge and confidence of a student radiographer.

3- Student performance is Weak

- Student performed task with minimal help from evaluator. Student shows need for improvement in skills and/or knowledge of task.

2- Student performance is Very Weak

- Student needed extensive assistance from evaluator to effectively complete task at an appropriate skill level of a student radiographer. Student shows excessive need for skill and/or knowledge development/remediation.

1- Student performance is Unacceptable

- Student could not complete task. Task resulted in a repeat exam or task was terminated by the evaluator. Student shows immediate need for skill/knowledge development/remediation.

N/A – Not applicable: The student assisted the radiologist or was not required to perform this component of the competency evaluation.

COMPETENCY EVALUATION CRITERIA

1. The student evaluated the requisition, identified the patient, called patient by name (Mr., Mrs., Ms., etc.), introduced self to the patient, assisted patient to the room, explained the procedure to the patient, checked for any contraindications to the exam.
2. The student communicated proper examination instructions to the patient, using appropriate language and limited use of slang, for each view of the radiographic examination.
3. The student positioned the patient correctly (AP, PA, Oblique, etc.).
4. The central ray angulation was correct, centered to the patient at the proper centering point ant the image receptor was centered correctly.
5. The appropriate planes and baselines (i.e., MSP, OML) were correctly aligned to the image receptor.
6. The student correctly operated the radiographic equipment, tube/table controls, technic selection (kVp, mAs, AEC), SID, PBL.
7. The student effectively collimated the beam to the area of interest/image receptor size or used automatic collimation.
8. The student applied gonadal shielding (when appropriate).
9. The student demonstrated speed and accuracy in performing the examination in relation to the patient's condition.

IMAGE EVALUATION CRITERIA

1. The desired anatomical structures were demonstrated on the radiograph in their proper perspective.
2. The radiograph has an acceptable level of contrast and density.
3. The patient information and date, right and left markers, and procedural markers (i.e., hour, minute) are visible and correctly placed on the radiograph.
4. The student was able to identify the appropriate anatomy, answer questions, suggest improvements, and justify a repeat exposure (if necessary).

STANDARD COMPETENCY EVALUATION

The student is required to complete a required number of standard evaluations each semester (except during the clinical course RDLT-1290). The standard evaluation examinations can be completed **under the direct observation of a Registered Radiographer** in the clinical setting. Standard evaluations are evaluated on a pass/fail basis. If the student must repeat any part of the examination due to student error the evaluation will be considered a failure. The student must repeat the examination at a later date. Receiving three (3) failures on standard evaluations during the quarter will lower the final clinical grade by five (5) percentage points. Each additional failure will lower the clinical grade an additional five (5) percentage points.

If the student does not complete the required number of exams, their grade will be lowered in proportion to the percentage not completed.

Shawnee State University
Radiologic Technology Program

STANDARD EVALUATION FORM

Student_____Date_____Hospital_____

Patient's ID Number_____Examination_____

Criteria:		Patient's Transportation	
4- Highly Competent	1- Very Poor	Ambulatory _____	Stretcher _____
3- Above Average	0- Not Competent	Wheelchair _____	Portable _____
2- Competent	N/A- Not Applicable		

To Be Completed By a Staff Technologist (Identify with N/A, 0-4 Scale):

1. The examination room was prepared properly and anticipated supplies were available. _____
2. Student communicated appropriately with the patient supplying correct directions and explaining the procedure. _____
3. The student positioned the patient accurately without causing unnecessary discomfort. _____
4. The student manipulated the radiographic equipment in a safe manner without forcing the locks. _____
5. The appropriate cassette size was selected for the part to be radiographed and the area of interest was centered the middle of the image receptor. _____
6. The student provided appropriate shielding to the patient and collimated the radiographic field to the correct size. _____
7. The proper exposure factors were selected that would result in diagnostic radiographs. _____

Radiographic Evaluation:

8. Adequate radiographic density was visualized. _____

9. Adequate radiographic contrast was visualized. _____

10. The visualized detail was adequate and distortion was minimal. _____
11. Proper Alignment:
    Image receptor was centered to the body part being radiographed. _____

    The patient is centered to the middle of the image receptor as needed. _____

    Radiographic tube was centered to the patient and the image receptor. _____

12. The correct anatomical side marker was used and does not obscure essential anatomy. _____

Comments:_____

_____

_____

Technologist's Signature_____ Date_____

Student's
Signature_____Date_____

FACULTY PROCEDURAL EVALUATIONS

Each student will be evaluated by the program faculty on one (RDLT-1290), two (RDLT-1390, 2290, and 2390) and three (RDLT-2190) radiographic examinations each semester. The examinations will be chosen by the faculty and will be on exams that the student has already completed for mandatory competency evaluation or standard competency evaluation. An eighty percent (80%) average on each procedural evaluation is necessary to pass the examination. Failure to pass the recheck examination requires the student to perform the same examination at another time. The average of the two scores must be equal to or greater than 80%.

Procedural evaluations will be averaged together and will account for thirty percent (30%) of the student's final clinical grade.

Shawnee State University
Radiologic Technology Program

UNIVERSITY FACULTY PROCEDURAL EVALUATION FORM

Student_____Date_____Hospital_____

Evaluator_____Exam_____

DIRECTIONS: Evaluate the student's performance according to the following criteria. Consideration should be given to the student's level of education and experience.

Criteria:	Patient Condition:	Projections:
4= Highly competent	1. Ambulatory	A_____
3= Above average	2. Fair	B_____
2 = Competent	3. Poor	C_____
1 = Very Poor	4. Serious	D_____
0 = Not competent	5. Critical	E_____
NA = Not Applicable		F_____

1. Patient Care and Handling							
	A	B	C	D	E	F	Comments
2. Patient Instructions							
3. Correct Position of Part							
4. Correct Tube-Patient-IR Alignment							
5. Positioning Planes Used /Used Correctly							
6. Equipment Manipulation							
7. Collimation							
8. Uses Appropriate Shielding							
9. Work Efficiency							

IMAGE EVALUATION

The student was able to identify/discuss/suggest improvements for the following:

	A	B	C	D	E	F	Comments
1. Anatomy Demonstrated and Centered							
2. Diagnostic Technique Adequate/Appropriate							
3. Radiographic Markers Visible							
4. Overall Image Quality							
5. Student Identification of Radiographs							

General Comments, Observations, or Recommendations:

Evaluator's Signature_____Date_____

Student's Signature_____Date_____

EVALUATION CRITERIA

4 – Highly Competent: The student performance was highly competent, he/she performed the exam at the level of an experienced radiographer.

3 – Above Average: The student performed the task at the level of above average and at the level of a graduate technologist.

2 – Competent: The student performed the task correctly, with no assistance from the evaluator.

1 – Very Poor: the student needed assistance from the evaluator.

0 – Not Competent: the student did not perform the task correctly and needed assistance from evaluator. The mistake would have required a repeat x-ray and the exam was terminated by the evaluator before the exam was completed.

N/A – Not applicable: The student assisted the radiologist or was not required to perform this component of the competency evaluation.

COMPETENCY EVALUATION CRITERIA

1. The student evaluated the requisition, identified the patient, called patient by name (Mr., Mrs., Ms., etc.), introduced self to the patient, assisted patient to the room, explained the procedure to the patient, checked for any contraindications to the exam.

2. The student communicated proper examination instructions to the patient, using appropriate language and limited use of slang, for each view of the radiographic examination.

3. The student positioned the patient correctly (AP, PA, Oblique, etc.).

4. The central ray angulation was correct, centered to the patient at the proper centering point and the image receptor was centered correctly.

5. The appropriate planes and baselines (i.e., MSP, OML) were correctly aligned to the image receptor.

6. The student correctly operated the radiographic equipment, tube/table controls, technic selection (kVp, mAs, AEC), SID, PBL.

7. The student effectively collimated the beam to the area of interest/IR size or used automatic collimation.

8. The student applied gonadal shielding (when appropriate).

9. The student demonstrated speed and accuracy in performing the examination in relation to the patient's condition.

IMAGE EVALUATION CRITERIA

1. Density controlling factors were properly selected as evident on the radiograph.
2. Contrast controlling factors were properly selected as evident on the radiograph.
3. Collimation is evident on all four sides of the radiograph (when appropriate).
4. The quality of the entire image meets acceptable standards.
5. The desired anatomical part is aligned appropriately with the IR.
6. Positioning of the part is appropriate as evident on the radiograph.
7. The patient information and date, right and left markers, and procedural markers (i.e., hour, minute) are visible and correctly placed on the radiograph.
8. The student was able to identify the appropriate anatomy, answer questions, suggest improvements, and justify a repeat exposure (if necessary).

CLINICAL PERFORMANCE EVALUATION I, II and III

These evaluations will be used to assess the overall performance of a student in clinical education.

Clinical Performance Evaluation I is used during the first five (5) weeks of Fall Semester clinical course RDLT-1290. A maximum grade of 70 points can be awarded during this evaluation period. If a student receives four (4) or more unsatisfactory ratings, the student will receive a grade of fifty (50) points or less which would be equivalent to a C- or less. This would result in the student be placed on probation and would require they improve their grade on the subsequent two (2) evaluation that follow (Clinical Evaluation form II). If the student fails to improve their evaluation during the remaining 10 weeks they may fail clinical education course RDLT-1290 and will be dismissed from the program.

Clinical Performance Evaluation II is used to assess the overall performance of a student during the second five weeks and last five weeks of RDLT-1290 and every five weeks during RDLT-1390 clinical education courses.

Clinical Performance Evaluation III is used each evaluation period during RDLT - 2190, 2290, and 2390 clinical education courses.

Both Clinical Performance Evaluation II and III have a maximum point value of 95. An average of the ratings (i.e., 84/95 = 88.4%) on this form will be used to determine a part of the student's final clinical grade.

***Have been updated, Addendum provide 5/2019

Revised 07/21/2007
Reviewed 07/13/18

Shawnee State University

Radiologic Technology Program

Clinical Evaluation Form 1
RDLT -1290

Student: _____ Fall Semester _____

Clinical Center:_____
Directions: Please evaluate the student according to the following items. Be objective and consider each student according to his/her level of professional development. Circle the appropriate responses, **"S" for satisfactory**, **"NI" for needs improvement**, and **"U" for unsatisfactory**.
Note: Four "U: ratings or more require the student to be placed on clinical probation during the next evaluation period. Unsatisfactory ratings must be supported by written comments.

	Points:	**5**	**2.5**	**0**
1.	Willingness to learn**.**	**S**	**NI**	**U**
2.	Willingness to volunteer and assist technologists**.**	**S**	**NI**	**U**
3.	Ability to listen and follow directions.	**S**	**NI**	**U**
4.	Ability to accept constructive criticism.	**S**	**NI**	**U**
5.	Handling of patients.	**S**	**NI**	**U**
6.	Relationship with patients.	**S**	**NI**	**U**
7.	Relationship with department staff**.**	**S**	**NI**	**U**
8.	Relationship with radiologist/physicians.	**S**	**NI**	**U**
9.	Equipment manipulation.	**S**	**NI**	**U**
10.	Confidence.	**S**	**NI**	**U**
11.	Punctuality.	**S**	**NI**	**U**
12.	Appearance.	**S**	**NI**	**U**
13.	Communication.	**S**	**NI**	**U**
14.	Overall performance.	**S**	**NI**	**U**

TOTAL POINTS: _____ **GRADE**_____

A = 66 – 70	**B- = 56 - 58**
A- = 63 – 65	**C+ = 54 - 55**
B+ = 61 – 62	**C = 52 - 53**
B = 59 - 60	**C- = 49 – 51**

It is difficult to evaluate the performance of beginning students. There are ways that you can help provide direction which will give the student a better perspective on what is expected of them. The following are questions that can clarify the student's performance. Please circle your response and comment as needed.

---

1. Did the student show an appropriate interest level? **Yes / No**

If No, how can the student improve?

2. Do you think this student has a healthy level of assertiveness? **Yes / No**

If No, how can the student improve?

3. Does the student respond well and communicate well with patients? **Yes / No**

If No, how can the student improve?

4. Does the student appear to have enough confidence? **Yes / No**

If No, is there too much hesitation to perform exams or is the student over confident?

5. Is there any additional advice that you can give the student to help them improve?

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

Student's Signature:_____ **Date:**_____

Revised: 7/14/2011 Reviewed 07/13/18

SHAWNEE STATE UNIVERSITY
RADIOLOGIC TECHNOLOGY PROGRAM
Clinical Performance Evaluation II for RDLT Courses 1290 and 1390

Student's Name:_____
Affiliate:_____

Semester/Year:_____
Date:_____

90 - 95 = A	76 - 79 = B-
86 - 89 = A-	74 - 75 = C+
84 - 85 = B+	70 - 73 = C
80 - 83 = B	67 - 69 = C-

Evaluation Period: First 5 Weeks / Second 5 Weeks / Final 5 Weeks

Circle best description of student's clinical performance:

	0 points	6.5 points	8 points	10 points
Quality of Work	Makes repeated mistakes	Needs much Improvement	Work generally acceptable	Generally exceeds basic requirements
Application of Knowledge	Doesn't make rational decisions or retain information	Seldom makes logical decisions & has difficulty retaining information	Explains correct procedure but doesn't always make accurate decisions or retain information which has been presented in detail	Makes accurate decisions & is quick to understand new information
Attitude and Initiative	Seldom completes tasks, considered "lazy", usually does not take action	Occasionally completes tasks, often needs prodding to take action	Usually completes tasks, stays busy performing useful activities	Completes tasks, is hard working, and seeks additional tasks
Organization	Has difficulty applying instructions, needs constant supervision	Is somewhat organized but needs supervision	Plans time & work reasonably well, needs some supervision	Is able to perform difficult exams with minimal supervision
Efficiency	Is usually too slow and inaccurate	Usually needs to be encouraged to speed up	Occasionally needs to be encouraged to speed up	Completes exam in expected time

_____				
Patient Rapport	Doesn't try to communicate with patients	Has difficulty communicating with patients or talks too much	Shows concern for patient but needs to communicate more with patients	Shows concerned for patient and communicates well with patients
_____				
Work Relationships	Is hostile or indifferent, does not work well with others	Expresses tolerance of people, would rather work alone	Willing to help when asked, displays polite conduct	Works well with others, volunteers assistance
_____				
Attitude Toward Criticism	Unable to accept constructive criticism, hostile, blames others	Argumentative when criticized, does not accept criticism well, gives invalid excuses	Accepts criticism well but doesn't always take immediate action to correct weakness	Accepts criticism well & takes immediate action to correct weakness
	0 points	**2 points**	**3 points**	**5 points**
Punctuality	Usually late or absent	Often late or absent	Sometimes late but not absent without a good reason	Rarely late or absent
Personal Appearance	Usually not clean, sloppy	Usually clean but often untidy	Usually clean & neat	Always well groomed, neat & clean
Care & Handling of Equipment	Abuses equipment, requires constant prodding to keep assigned room clean	Rough with equipment, sometimes cleans room without being reminded	Usually handles equipment without difficulty & keeps assigned room clean	Work area is clean and tidy, uses equipment safely and cautiously

Shawnee State University
Clinical Performance Evaluation- Second Year Summer Semester (RDLT 2190)
Performed by: Clinical Instructor assigned at affiliate facility

The student is assessed in the following areas by the assigned Clinical Instructor from affiliated facility. Clinical Instructors evaluate students at midterm and at the end of the semester and should assess students based on the current experience level in the program. Clinical Instructors are expected to leave comments on student performance and students are expected to review evaluations after completion. The evaluations are a portion of the student clinical grade.

Grading key:
Unacceptable (0U)
Needs Major Improvement (0N)
Needs Minor Improvement (4)
Satisfactory (4.5)
Outstanding (5)

Statement:	Grading key:
1. Student arrives at clinical rotation ready to begin the day with cleaned and stocked examination rooms.	
2. Student is dressed appropriately. Appears neat, clean and professional.	
3. Student demonstrates knowledge of patient care and is able to apply skills in the clinical setting.	
4. Student demonstrates knowledge of proper positioning skills (repeat exams are kept to a minimal)	
5. Student provides adequate radiation protection practices to all patients.	
6. Student communicates effectively as a team member with staff and other health care personnel.	
7. Student communicates effectively with patients showing professionalism with maturity and empathy without judgment.	
8. Student demonstrates a positive attitude; accepts criticism and works to adjust accordingly.	
9. Student works efficiently and stays busy with relevant activities; demonstrates positive work initiative.	
10. Student performs examinations in a timely manner to provide a safe patient environment.	
11. Student demonstrate skills to manipulate technical factors relevant to the procedure.	
12. Student demonstrates initiative to assist with fluoroscopy (if applicable), surgical examinations (if applicable) or portable exams.	
13. Student demonstrates effectively critical thinking in non-routine and trauma situations to provide quality diagnostic images.	
14. Student applies critical thinking skills to identify and seek solutions to adjust for repeat examinations.	

Shawnee State University
Clinical Performance Evaluation- Second Year (RDLT 2290 & 2390)
Performed by: Clinical Instructor assigned at affiliate facility

The student is assessed in the following areas by the assigned Clinical Instructor from affiliated facility. Clinical Instructors evaluate students at midterm and at the end of the semester and should assess students based on the current experience level in the program. Clinical Instructors are expected to leave comments on student performance and students are expected to review evaluations after completion. The evaluations are a portion of the student clinical grade.

Grading key:
Unacceptable (0U)
Needs Major Improvement (0N)
Needs Minor Improvement (4)
Satisfactory (4.5)
Outstanding (5)

Statement:	Grading key:
1. Student arrives at clinical rotation ready to begin the day with cleaned and stocked examination rooms.	
2. Student is dressed appropriately. Appears neat, clean and professional.	
3. Student demonstrates knowledge of patient care and is able to apply skills in the clinical setting.	
4. Student demonstrates knowledge of proper positioning skills (repeat exams are kept to a minimal)	
5. Student provides adequate radiation protection practices to all patients.	
6. Student communicates effectively as a team member with staff and other health care personnel.	
7. Student communicates effectively with patients showing professionalism with maturity and empathy without judgment.	
8. Student demonstrates a positive attitude; accepts criticism and works to adjust accordingly.	
9. Student works efficiently and stays busy with relevant activities; demonstrates positive work initiative.	
10. Student performs examinations in a timely manner to provide a safe patient environment.	
11. Student manipulates technical factors selections based on patient ability and pathology.	
12. Student is effectively performing fluoroscopy (if applicable), surgical examinations (if applicable) or portable exams.	
13. Student demonstrates effective critical thinking in non-routine and trauma situations to provide quality diagnostic images.	
14. Student applies critical thinking skills to identify, seek and adjust position or diagnostic technique to effectively adjust for repeat examinations.	

Shawnee State University
Faculty Clinical Performance Evaluation
Performed by: Shawnee State Radiologic Technology Faculty

The student is assessed in the following areas by faculty members after a clinical site visit(s). Faculty members are expected to leave comments on student performance and students are expected to review evaluations after completion. The evaluations are a portion of the student clinical grade.

Grading key:
Unacceptable (0U)
Needs Major Improvement (0N)
Needs Minor Improvement (4)
Satisfactory (4.5)
Outstanding (5)

Statement:	Grading key:
1. Student is dressed appropriately. Appears neat, clean and professional. Following all guidelines set by program handbook.	
2. Student demonstrates knowledge of patient care and is able to apply skills in the clinical setting.	
3. Student demonstrates knowledge of proper positioning skills.	
4. Student provides adequate radiation protection practices to all patients.	
5.Student communicates effectively as a team member with staff and other health care personnel.	
6. Student communicates effectively with patients showing professionalism with maturity and empathy without judgment.	
7. Student demonstrates a positive attitude; accepts criticism and works to adjust accordingly.	
8. Student works efficiently and stays busy with relevant activities; demonstrates positive work initiative.	
9. Student performs examinations in a timely manner to provide a safe patient environment.	
10. Student applies critical thinking skills to identify and seek solutions to adapt to individual patient situations with knowledge of procedures and patient care. Student adjust technical values accordingly (if applicable.)	

PROGRAM FACULTY CLINICAL PERFORMANCE EVALUATION

One Clinical Performance Evaluation is completed at the end of RDLT clinical courses 1390, 2290 and 2390 by the program faculty. Each evaluation is worth a maximum of thirty (30) points. When the evaluation is calculated into the final clinical grade at the end of each a semester it accounts for fifteen percent (15%) of that grade.

*****Updated, Addendum provided 5/2019

Reviewed 07/13/18

Shawnee State University
Radiologic Technology Program

PROGRAM FACULTY CLINICAL PERFORMANCE EVALUATION

RDLT Courses 1390, 2290, and 2390

Student's Name:_____ Affiliate:_____

Semester/Year:_____Date:_____

Circle best description of student's clinical performance:

	0 points	2 points	3 points
Quality of Work	Needs Improvement	Work generally acceptable	Generally exceeds basic requirements
Application of Knowledge	Appears to make irrational decisions and has not retained didactic or clinical information.	Explains correct procedure but doesn't always make accurate decisions or retain didactic or clinical information	Makes accurate decisions and displays ability to perform exams utilizing didactic and clinical information
Attitude and Initiative	Displays a poor attitude to clinicals, could be considered "lazy"	Usually completes tasks, but often needs prodding to take action. Attitude to clinicals is GOOD / POOR	Completes tasks, stays busy performing useful activities. Good attitude.
Organization	Is not organized. Makes patients wait, is unorganized.	Is somewhat organized but needs improvement.	Is well organized and performs exams in a logical sequence.
Efficiency	Rechecks self too often. Too slow and inaccurate.	Occasionally needs to be encouraged to speed up.	Completes exam in expected time.
Patient Rapport/ Communication	TOO / NOT concerned for patient . Communication problem . Talks: TOO MUCH / TOO LITTLE	Shows concern for patient but needs to communicate MORE / LESS with patients.	Always concerned and communicates appropriately with patients.
Work Relationships	Disrespectful to coworkers. Does not work well with in a team environment.	Willing to help when asked, does not volunteer assistance. Respectful to coworkers.	Works well with others, volunteers assistance
Attitude Toward Criticism	Argumentative when criticized , is hostile and give invalid excuses.	Accepts criticism but doesn't take immediate action to correct weakness.	Accepts criticism well & takes immediate action to correct weakness.
Critical Thinking/ Problem Solving	Makes inappropriate decisions regarding procedures.	Uses knowledge of procedures but has difficult adapting to unusual situations.	Adapts procedures as needed possesses good problem solving skills.
Care and Handling of Equipment	Abuses equipment, requires constant prodding to keep assigned room clean and stocked.	ROUGH / GENTLE with equipment . Sometimes cleans room without being reminded.	Assigned room is clean and stocked. Treats equipment gently.

CONTINUE ON BACK

TOTAL POINTS _____

Evaluator's
Comments:_____

_____

_____

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_____

Student's
Comments:_____

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

Student's
Signature:_____ **Date:**_____

27 - 30	=	A
24 - 26	=	B
21 - 23	=	C
18 - 20	=	D
17 - <	=	F

STUDENT ORIENTATION POLICY

At the beginning of each new clinical rotation the student must be oriented to the Radiology Department of the affiliate hospital by the Clinical Instructor (or designee), using the criteria on the "Student Orientation Checklist." After the orientation, the student will be able to perform the tasks listed on the "Student Orientation Checklist," and the checklist should be completed by the third week of the semester on-line at the *Trajecsys.com* web site or in paper form returned to the Clinical Coordinator. This is to ensure that every student is familiar with the different areas and emergency procedures/equipment of each department.

An example of the "Student Orientation Checklist" follows on the next page.

Shawnee State University
Radiologic Technology Program

STUDENT ORIENTATION CHECKLIST

Student: _____ Date: _____

Hospital: _____ Semester:_____

****

INSTRUCTIONS: The clinical supervisor and/or designee will use the following criteria to orient the student to the Radiology Department, equipment and hospital facilities during the first week of each new clinical rotation. Upon the completion of the orientation, the supervisor will use the checklist to evaluate the student's performance on the tasks listed below. The checklist should be returned to the clinical coordinator to be placed in the student's clinical file.

****

PLACE A **Y** FOR YES, **N** FOR NO.

A. The student will be able to locate:

1. patient room. _____
2. other hospital departments, (OR, ER, etc.). _____
3. wheelchairs, carts, linen and supply areas. _____
4. patient waiting areas and dressing rooms. _____
5. front desk and film filing areas. _____
6. processing area. _____

B. The student will be able to locate and become familiar with the following emergency equipment and procedures:

1. emergency telephone numbers. _____
2. crash cart and/or emergency drugs. _____
3. defibrillator, ambu bag, ET tubes. _____
4. oxygen, ammonia inhalants, blood pressure cuffs. _____
5. fire extinguishers. _____
6. emergency procedures. _____

C. The student will be able to locate and become familiar with the use and operation of the radiographic equipment in the following areas:

1. diagnostic radiography. _____
2. fluoroscopy. _____
3. portable radiography. _____
4. surgery. _____

D. The student will become familiar with the department's radiographic routines for the various radiographic examinations. _____

Technologist's
Signature_____

COMPETENCY UNIT I

During the first clinical rotation (the clinical course RDLT-1290) the radiologic technology students are required to complete Competency Unit I. Following the completion of this unit, the student will be able to demonstrate competent performance in the following areas: computer radiography or radiographic darkroom*, office, transportation, and radiographic room.

The main objective of Competency Unit 1 is to orient the student to the different areas of the radiology department.

The student will spend a minimum of eight (8) hours of clinical education in each of these areas. Upon completion of each rotation, the student will be evaluated on his/her knowledge of the following objectives using the appropriate found on line in the Trajecsys.com web site or on a paper form supplied by the program. The forms should be completed by the Clinical Instructor.

* All students are introduced to the darkroom environment during the laboratory component of Course RDLT-1341.

Shawnee State University
Radiologic Technology Program - Competency Unit 1

DIGITAL OR COMPUTED RADIOGRAPHY CHECKLIST

Student: _____ Date: _____

Clinical Site:_____Semester:_____

****

Instructions: The clinical instructor and/or radiologic technologist should use the following criteria to orient the student to the Computed Radiography System. Upon completion of the orientation, the supervisor will use the checklist to evaluate the student's performance on the tasks listed below. The checklist should be returned to the clinical coordinator to be placed in the student's clinical file.

****

Place a **Y** for yes, **N** for No.

The student will be able to:

1. Log on to the Radiography Information System. _____
2. Enter patient information manually or by bar code reader prior to or following the examination. _____
3. Prepare an imaging plate (cassette) for a specific radiographic examination. _____
4. Demonstrate the proper placement and centering of the body part in relation to the Image Receptor. _____

Following the radiographic exposure:

5. Place the imaging receptor into the plate reader. _____
6. Identify problems with the image reader.
7. Demonstrate the use of the processing station to review radiographic image as listed below:
    a. Adjust brightness _____
    b. Adjust contrast _____
    c. Annotate the image as needed _____
    d. Evaluate image for over or under exposure _____
    e. Archive the processed image _____
    f. Send the image to appropriate station for review by a physician _____
    g. Print image as needed _____
8. Replace imaging plate in proper storage areas. _____

Evaluator's Signature _____

Revised 07/27/2007
Reviewed 07/13/18

Shawnee State University
Radiologic Technology Program
Competency Unit I

OFFICE CHECKLIST

Student: _____Date:_____

Clinical Site: _____ Semester:_____

Instructions: The clinical supervisor and/or office personnel should use the following criteria to orient the student to the office. Upon completion of the orientation, the supervisor will use the checklist to evaluate the student's performance on the tasks listed below. The checklist should be returned to the clinical coordinator to be placed in the student's clinical file.

_____

Place a **Y** for yes, **N** for No.

The student will be able to:

1. Demonstrate professional usage of the telephone. _____
2. Perform the necessary handling of an x-ray exam requisition. _____
3. Observe the following office procedures:
   a. checking/logging in patients. _____
   b. assigning/recording hospital or radiology department numbers. _____
   c. making up a film/requisition jacket. _____
5. File/retrieve film jackets, requisitions, or previous images. _____
6. Give clear oral instructions to ambulatory patient about dressing/ undressing for exams, where the dressing rooms are located, where to be seated. _____

Evaluator's Signature: _____

Shawnee State University
Radiologic Technology Program
Competency Unit I

TRANSPORTATION CHECKLIST

Student: _____ Date: _____

Clinical Site: _____ Semester:_____

****

Instructions: The clinical supervisor and/or transportation personnel should use the following criteria to orient the student to transportation procedures. Upon completion of the orientation, the supervisor will use the checklist to evaluate the student's performance on the tasks listed below. The checklist should be returned to the clinical coordinator to be placed in the student's clinical file.

****

Place a **Y** for Yes, **N** for No.

The student will be able to:

1. Locate patient rooms. _____
2. Locate where the wheelchairs and carts are located in the department. _____
3. Locate patient waiting areas. _____
4. Determine a patient's mode of travel according to the radiologic requisition. _____
5. Safely maneuver a wheelchair and cart both with and without a patient. _____
6. Issue appropriate information to nursing stations upon attaining or returning patients. _____
7. Safely move patients in and out of wheelchairs/carts. _____
8. Notify the appropriate radiology personnel upon arrival with the patient in the radiology department. _____
9. Demonstrate concern for the patient's safety, comfort, dignity and privacy during transportation of the patient to the radiology department. _____

Evaluator's Signature: _____

Shawnee State University
Radiologic Technology Program - Competency Unit 1

RADIOGRAPHIC EQUIPMENT CHECKLIST

Student: _____ Date: _____

Clinical Site: _____ Semester:_____

Instructions: The clinical supervisor and/or designee should use the following criteria to orient the student to the radiographic equipment. Upon completion of the orientation, the supervisor will use the checklist to evaluate the student's performance on the tasks listed below. The checklist should be returned to the clinical coordinator to be placed in the student's clinical file.

The student will be able to:	Place a **Y** for yes, **N** for No.
1. Identify various cassette sizes.	_____
2. Turn on/off x-ray machine.	_____
3. Move x-ray tube lengthwise, vertically, transversely.	_____
4. Angle and rotate x-ray tube.	_____
5. Identify and use S.I.D. (Source to Image Distance) indicator.	_____
6. Master PBL (Positive Beam Limitation) controls.	_____
7. Identify and use collimator control knobs.	_____
8. Identify filter selector.	_____
9. Move tabletop in four directions.	_____
10. Align tube with table.	_____
11. Load bucky tray with image receptor.	_____
12. Place proper side of image receptor facing x-ray tube.	_____
13. Change cassettes in bucky tray.	_____
14. Move bucky tray.	_____
15. Align x-ray tube with bucky tray.	_____
16. Identify chest (upright) unit.	_____
17. Vary height of chest unit.	_____
18. Align tube with chest unit.	_____
19. Load and change image recptors in chest unit.	_____
20. Locate technique charts.	_____
21. Set a technique (using mA, time, kV, AEC).	_____
22. Make an exposure.	_____

Evaluators signature: _____

SPECIALTY AREA CLINICAL ROTATIONS

During the last two clinical rotations (RDLT-2290 & 2390) Radiologic Technology Program students can begin rotations through the specialty areas listed below. Students are required to complete rotations through these areas prior to graduation. Students are required to spend a minimum of one clinical day (eight [8] hours) in each of the following specialty areas prior to graduation.

Computed Tomography
Diagnostic Medical Sonography
Radiation Therapy
Magnetic Resonance Imaging
Nuclear Medicine
*Mammography

Students must return the appropriate completed checklist from each area to the clinical coordinator upon completion of the rotation.

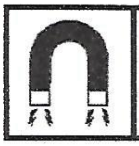
**Mammography is an additional clinical rotation not offered by all clinical affiliates and is not required as a modality rotation by the Radiologic Technology Program. If students would like to be provided a rotation in Mammography, the student should first ask their clinical site for permission. If permission is granted, the student can observe in Mammography. However, if permission is not granted, the student can see the Clinical Coordinator to try to find a clinical affiliate that allows observations in Mammography (if available). There is not a checklist to be completed for Mammography because it is not a required rotation for graduation.*

Magnetic Resonance Imaging Safety Protocol

Students enrolled in the Radiologic Technology Program are required to perform an eight-hour observation in Magnetic Resonance Imaging (MRI). The program has adopted a screening protocol to ensure proper safety practices for students during the time they may interact with MR Imaging. Students are provided education about MR safety in the fifth semester of the program during RLDT 2260. Additionally, the students will be screened during the course by the instructor using a “Magnetic Resonance (MR) Environment Screening Form for Individuals” provided by the International Society of Magnetic Resonance in Medicine (ISMRM). The screening form is provided with this protocol.

In addition to the screening provided by Shawnee State University, some clinical affiliates may perform additional screening per the facility’s individual protocol. The student should be aware of the screening protocol both by the Radiologic Technology Program and the individual clinical affiliate.

MAGNETIC RESONANCE (MR) ENVIRONMENT SCREENING FORM FOR INDIVIDUALS*



The MR system has a very strong magnetic field that may be hazardous to individuals entering the MR environment or MR system room if they have certain metallic, electronic, magnetic, or mechanical implants, devices, or objects. Therefore, all individuals are required to fill out this form BEFORE entering the MR environment or MR system room. Be advised, the MR system magnet is ALWAYS on.

***NOTE: If you are a patient preparing to undergo an MR examination, you are required to fill out a different form.**

Date ____/____/____ (month / day / year) Name _____ (Last Name / First Name / Middle Initial) Age _____

Address _____ Telephone (home) (____) ____-____

City _____ Telephone (work) (____) ____-____

State _____ Zip Code _____

1. Have you had prior surgery or an operation (e.g., arthroscopy, endoscopy, etc.) of any kind? ❒ No ❒ Yes
   If yes, please indicate date and type of surgery: Date ____/____/____ Type of surgery_____
2. Have you had an injury to the eye involving a metallic object (e.g., metallic slivers, foreign body)? ❒ No ❒ Yes
   If yes, please describe: _____
3. Have you ever been injured by a metallic object or foreign body (e.g., BB, bullet, shrapnel, etc.)? ❒ No ❒ Yes
   If yes, please describe: _____
4. Are you pregnant or suspect that you are pregnant? ❒ No ❒ Yes

WARNING: Certain implants, devices, or objects may be hazardous to you in the MR environment or MR system room. Do not enter the MR environment or MR system room if you have any question or concern regarding an implant, device, or object.

Please indicate if you have any of the following:

❒ Yes ❒ No Aneurysm clip(s)
❒ Yes ❒ No Cardiac pacemaker
❒ Yes ❒ No Implanted cardioverter defibrillator (ICD)
❒ Yes ❒ No Electronic implant or device
❒ Yes ❒ No Magnetically-activated implant or device
❒ Yes ❒ No Neurostimulation system
❒ Yes ❒ No Spinal cord stimulator
❒ Yes ❒ No Cochlear implant or implanted hearing aid
❒ Yes ❒ No Insulin or infusion pump
❒ Yes ❒ No Implanted drug infusion device
❒ Yes ❒ No Any type of prosthesis or implant
❒ Yes ❒ No Artificial or prosthetic limb
❒ Yes ❒ No Any metallic fragment or foreign body
❒ Yes ❒ No Any external or internal metallic object
❒ Yes ❒ No Hearing aid
❒ Yes ❒ No Other implant_____
❒ Yes ❒ No Other device_____

IMPORTANT INSTRUCTIONS

Remove all metallic objects before entering the MR environment or MR system room including hearing aids, beeper, cell phone, keys, eyeglasses, hair pins, barrettes, jewelry (including body piercing jewelry), watch, safety pins, paperclips, money clip, credit cards, bank cards, magnetic strip cards, coins, pens, pocket knife, nail clipper, steel-toed boots/shoes, and tools. Loose metallic objects are especially prohibited in the MR system room and MR environment.

Please consult the MRI Technologist or Radiologist if you have any question or concern BEFORE you enter the MR system room.

I attest that the above information is correct to the best of my knowledge. I have read and understand the entire contents of this form and have had the opportunity to ask questions regarding the information on this form.

Signature of Person Completing Form: _____ (Signature) Date ____/____/____

Form Information Reviewed By: _____ (Print name) _____ (Signature)

❒ MRI Technologist ❒ Radiologist ❒ Other _____

Shawnee State University
Radiologic Technology Program

COMPUTED TOMOGRAPHY CHECKLIST

Student:_____ Date:_____

Hospital:_____Semester:_____

++
INSTRUCTIONS: The CT technologist should use the following criteria to orient the student to CT procedures. Upon completion of the student's rotation, the technologist should use the checklist to indicate the student's performance or participation in the areas listed. The checklist must be returned to the clinical coordinator to be placed in the student's clinical file.
++

Place a **Y** for yes, **N** for no

After completion of the student's rotation through CT, the student will be able to*:

1. Review patient's clinical history/requisition _____
2. Observe preparation of appropriate contrast media _____
3. Communicate exam instructions to patient _____
4. Observe positioning of a patient for CT examinations of the head, and thorax or abdomen _____
5. Identify and operate CT gantry, table, localizing lights _____
6. Observe the operation the CT control console to include:
   a. startup of unit/test scanning of phantoms _____
   b. selection of window level/width _____
   c. selection of matrix size, technique factors _____
   d. selection of slice thickness and filters _____
   e. initiating scan sequence _____
7. Observe proper filming sequence of the CT images _____
8. Differentiate between pixel, voxel _____
9. Identify basic anatomy on CT images of the head, thorax and abdomen _____

Technologist's Comments:_____
_____

Technologist's Signature: _____ Date_____
*Under the direct supervision of a CT technologist.

Shawnee State University
Radiology Technology Program

DIAGNOSTIC MEDICAL SONOGRAPHY CHECKLIST

Student:_____ Date:_____

Hospital:_____ Semester: _____

****

INSTRUCTIONS: The ultrasound technologist should use the following criteria to orient the student to ultrasound. Upon completion of the student's rotation, the technologist should use this checklist to indicate the student's performance or participation in the areas listed. The checklist must be returned to the clinical coordinator to be placed in the student's clinical file.

****

Place a **Y** for yes or a **N** for no

After completion of the student's rotation through ultrasound, the student will be able to*:

1. Become familiar with the history of ultrasound _____
2. Describe the physical principles of ultrasound to include: _____
   a. ultrasonic waves, imaging principles
   b. imaging modes
   c. transducers
   d. resolution, frequency
   e. doppler effect/spectral analysis
3. Operate the ultrasound machine _____
4. Observe basic scans, exams to include:
   a. longitudinal and transverse scans _____
5. Identify basic cross-sectional anatomy _____
6. Identify cystic structures: _____
   a. no internal echoes, posterior wall, enhancement
7. Identify common diseases/conditions demonstrated by ultrasound _____
8. Recognize artifacts (gas, adipose tissue, etc.) _____
9. List indications for various exams _____
10. Describe patient preparation/scheduling for exams _____
11. Obtain patient history/give proper _____
12. Complete necessary paperwork _____

Technologist's Comments:_____

_____

_____

Sonographer's Signature:_____ Date:_____

*Under the direct supervision of a Diagnostic Medical Sonographer.

Revised 12/7/2006
Reviewed 7/13/18

Shawnee State University
Radiologic Technology Program

RADIATION THERAPY CHECKLIST

Student:_____ Date:_____

Hospital:_____ Semester:_____

****

INSTRUCTIONS: The radiation therapy technologist should use the following criteria to orient the student to radiation therapy procedures. Upon completion of the student's rotation, the technologist should use the checklist to indicate the student's performance or participation in the areas listed. The checklist must be returned to the clinical coordinator to be placed in the student's clinical file.

****

Place a **Y** for yes or a **N** for no

After completion of the student's rotation through radiation therapy, the student will be able to*:

1. Review patient's chart _____
2. Review patient's radiographs (when pertinent) _____
3. Observe operation of radiation therapy equipment to include: _____
   a. collimator light
   b. distance light
   c. table
   d. other controls
4. Assist in preparing patient for treatment _____
5. Observe the technologist mark/locate area of treatment _____
6. Observe preparation of radiation therapy machine for treatment _____
7. Observe the use of calibration charts and dose charts _____
8. Assist in taking port films with radiation therapy unit or radiographs of patient in radiology department when necessary _____
9. Assist with patient checkup _____
10. Attend to patient's safety and comfort _____
11. Assist in necessary paperwork completion _____

Technologist's Comments:_____

_____

_____

Technologist's Signature:_____ Date:_____

* Under the direct supervision of a radiation therapy technologist.

Revised 12/7/2006
Reviewed 07/13/18

Shawnee State University
Radiologic Technology Program

NUCLEAR MEDICINE CHECKLIST

Student: _____ Dates: _____

Hospital: _____ Semester_____

INSTRUCTIONS: The nuclear medicine technologist should use the following criteria to orient the student to nuclear medicine procedures. Upon completion of the student's rotation, the technologist should use this checklist to indicate the student's performance or participation in the areas listed. The checklist must able returned to the clinical coordinator to be placed in the student's clinical file.

Place a **Y** for yes or **N** for no

After completion of the student's rotation through nuclear medicine, the student will be able to*:

1. Maintain appropriate records _____

2. Become familiar with the hot lab, to include _____
   a. operating generator
   b. mixing kits
   c. identifying appropriate radionuclides and the exams they are used for
   d. follow radiation safety standards

3. Observe operation of the camera _____

4. Assist in changing collimators _____

5. Observe the operation of the nuclear medicine console _____
   a. select appropriate exposure factors
   b. properly film the images

6. Assist in performing computer studies _____
   a. data acquisition
   b. processing

7. Identify the indications for, and the starting position of the patient for the following exams:
   a. bone scans _____
   b. liver/spleen scans _____
   c. lung scans _____
   d. thyroid scans _____
   e. others _____

Technologist's Comments:_____

_____

Technologist's Signature:_____ Date:_____

*Under the direct supervision of a nuclear medicine technologist.

Revised 12/7/2006
Reviewed 07/13/18

Shawnee State University
Radiologic Technology Program

MAGNETIC RESONANCE IMAGING CHECKLIST

Student:_____ Date:_____

Hospital:_____ Semester:_____

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INSTRUCTIONS: The MRI technologist should use the following criteria to orient the student to the Magnetic Resonance Imaging Department. Upon completion of the student's clinical rotation, the technologist should use this checklist to indicate the student's performance or participation to the areas listed. The checklist must be returned to the clinical coordinator by the student to be placed in the student's clinical file.

****

Place a **Y** for yes or **N** for no

After completion of the student's rotation though MRI, the student will be able to:

1. Possess a basic understanding of how MRI is different from radiography or CT: _____

2. Describe the principles of MRI to include:
   a. The size and type of magnet: _____
   b. Radiofrequency Wave generation: _____
   c. RF coils: _____

3. Evaluate MRI procedure request: _____

4. Assist in screening patients for safety and explain why screening is important: _____

5. Assist with changing coils and room preparation: _____

6. Observe the setting of scan parameters and assist as needed: _____

7. Process patient request: _____

8. Observe archiving and archive retrieval of images for processing: _____

9. Identify basic cross-sectional anatomy: _____

10. Describe reasons an MRI imaging procedure would be preferred over another imaging modality: _____

11. Explain the use of contrast media in Magnetic Resonance Imaging: _____

12. Assist with patients as needed: _____

Technologists comments:_____

_____

Technologists signature:_____ Date:_____

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COMPETENCY EVALUATION MONITORING

The competency evaluation checklist is available to each student in the *Trajecsys.com* web site. This information is available by logging into the web site and reviewing your personal section. Radiologic Technology Program Faculty and your Clinical Instructors(s) at your current clinical site have access to your *Trajecsys.com* web site to monitor your progress and complete evaluations. You may request a check-list from the clinical coordinator if you want to document your progress using a paper document.

For most of the Mandatory Competency Evaluations students are required to observe, then assist with the examination prior to performing the competency procedure. The completion of the competency should be performed under the direct supervision of the Clinical Instructor or his/her designated Registered Radiographer. Some of the procedures that are not performed often require the student assist with the exam prior to performing a competency on the examination. The date the observation, assisting, and competency was performed should be entered on the checklists.

Standard Competencies can be performed under the direct supervision of a staff radiographer. Standard Competencies do not require the student observe then assist prior to performing the competency.

Students who do not have access to the internet at their clinical site can monitor their progress at home or the university. The Clinical Coordinator will document the competencies as they are turned in.

Competency Evaluation Checklist

Students must demonstrate competence in all 6 patient care activities listed, in all 37 procedures identified as mandatory, and 18 of the 34 standard procedures. Students must perform at least one of the 18 standard procedures from the head section. Students must also perform two standard fluoroscopy procedures - including an upper GI or barium enema, plus one other standard from the fluoroscopy section as a part of the 18 standards. All procedures must be performed under direct supervision and documented by the clincal instructor.

Imaging Procedure	**Mandatory or Standard**			
Unit 2	**Mandatory**	**Standard**	**Date**	**Tech**
Chest and Thorax				
Chest Routine	✓			
Chest AP (Wheelchair or Stretcher)	✓			
Ribs	✓			
Chest Lateral Decubitus		✓		
Sternum		✓		
Upper airway (Soft-Tissue Neck)		✓		
Unit 3				
Abdomen				
Abdomen Supine (KUB)	✓			
Abdomen Upright	✓			
Abdomen Decubitus		✓		
Intravenous Urography		✓		
Unit 4				
Upper Extremity				
Thumb or Finger	✓			
Hand	✓			
Wrist	✓			
Forearm	✓			
Elbow	✓			
Humerus	✓			
Shoulder	✓			
Trauma Shoulder (Scapular Y, Transthoracic or Axillary)	✓			
Clavicle	✓			
Scapula		✓		
AC Joints		✓		
Trauma: Upper Extremity (Non-Shoulder)	✓			

Unit 5	Mandatory	Standard	Date	Tech
Lower Extremity				
Toes		✓		
Foot	✓			
Ankle	✓			
Knee	✓			
Tibia/Fibula	✓			
Femur	✓			
Trauma: Lower Extremity	✓			
Patella		✓		
Calcaneus		✓		
Unit 6				
Head (Must select at least one from this selection)				
Skull		✓		
Paranasal Sinuses		✓		
Facial Bones		✓		
Orbits		✓		
Zygomatic Arches		✓		
Nasal Bones		✓		
Mandible		✓		
Temporomandibular Joints		✓		
Unit 7				
Spine and Pelvis				
Cervical Spine	✓			
Trauma: Cervical Spine (Cross-Table Lateral)	✓			
Thoracic Spine	✓			
Lumbar Spine	✓			
Pelvis	✓			
Hip	✓			
Cross-Table Lateral Hip	✓			
Sacrum and/or Coccyx		✓		
Scoliosis Series		✓		
Sacroiliac Joints		✓		
Unit 8				
Fluoroscopy Studies (Must select either upper GI or barium enema plus one other standard from this section)				

Fluoroscopy, Mobile, Surgical, Special Procedures	**Mandatory**	**Standard**	**Date**	**Tech**
Upper GI Series (Single or Double Contrast)		✓		
Barium Enema (Single or Double Contrast)		✓		
Small Bowel Series		✓		
Esophagus		✓		
Cystography/Cystourethrography		✓		
ERCP		✓		
Myelography		✓		
Arthrography		✓		
Hysterosalpingography		✓		
Surgery				
C-Arm Procedure (Requiring manipulation to obtain more than one projection)	✓			
C-Arm Procedure (Requiring manipulation around a sterile field)	✓			
Mobile Studies				
Chest	✓			
Abdomen	✓			
Orthopedic	✓			
Pediatrics (Age 6 or Younger)				
Chest Routine	✓			
Upper Extremity		✓		
Lower Extremity		✓		
Abdomen		✓		
Mobile Study		✓		
Geriatric Patient (Physically or Cognitively Impaired as a Result of Aging)				
Chest Routine	✓			
Upper Extremity	✓			
Lower Extremity	✓			

	Mandatory	**Standard**	**Date**	**Tech**
General Patient Care Procedures				
CPR	✓			
Vital Signs (Blood Pressure, Pulse, Respiration, Temperature, Pulse Oximetry)	✓			
Sterile and Aseptic Technique	✓			
Venipuncture	✓			
Transfer of Patient	✓			
Care of Patient Medical Equipment (e.g., Oxygen Tank, IV Tubing)	✓			

ARRT. (2016). Primary Certification Didactic and Clinical Competency Requirements: Radiography. Retrieved from https://www.arrt.org/pdfs/Disciplines/Competency-Requirements/RAD-Competency-Requirements.pdf