Naugatuck Valley Community College
Radiologic Technology Program Handbook

2021-2022
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1. **INTRODUCTION**

The students in the Radiologic Technology Program are expected to refer to the Naugatuck Valley Community College Catalog, the Student Handbook, and The Radiologic Technology Program Handbook for guidance and information about the program.

2. **MISSION STATEMENT/PROGRAM GOALS/STUDENT LEARNING OUTCOMES**

   **Mission Statement**

   The Radiologic Technology Program prepares students to enter the imaging sciences as an educated and skilled radiographer. The program, founded on close alliances with the professional community and the use of educational technology, creates a learning environment that prepares radiographers who:
   - Combine efficiency and compassion when imaging patients
   - Practice in accordance with theoretical knowledge and essential skills
   - Maintain high ethical standards
   - Strive for continued development as a professional
   - Commit to clinical excellence

   The following **Program Goals** and **Student Learning Outcomes (SLO)**, further support the mission statement of the Radiologic Technology Program:

   **Goal #1** - Students will demonstrate effective communication skills.
   **Measurable SLO:**
   - Students will demonstrate appropriate oral communication skills.
   - Students will demonstrate written communication skills

   **Goal #2** - Students will demonstrate clinical competence when performing entry level imaging procedures.
   **Measurable SLO:**
   - Students will demonstrate appropriate personal and patient radiation protection.
   - Students will accurately position patients.

   **Goal #3** - Students will combine critical thinking & problem-solving skills during the performance of imaging procedures.
   **Measurable SLO:**
   - Students will select technical factors when performing non-routine radiographic procedures.
   - Students will choose appropriate positioning when performing non-routine radiographic procedures.

   **Goal #4** - The program will graduate students with entry-level skills.
   **Measurable SLO:**
   - Students will pass the ARRT examination on the 1st attempt.
• Graduates seeking employment will have a job placement rate of not less than 75% within six months of graduation.
• Students will complete the program within 21 months.
• Students will be satisfied with their education.
• Employers will be satisfied with the graduate’s performance.

3. **ELECTRONIC BULLETIN BOARDS**

Electronic Bulletin boards serve as a medium for communication of important notices. The bulletin board located in the radiologic technology classroom should be checked on class days for important notices and information.

4. **CAMPUSEMERGENCIES / MY COMMNET ALERT**

NVCC has an emergency activation system. Campus emergencies may be announced through the phone speakers located in the classrooms. Notifications of emergencies and campus closings for inclement weather or other situations will be texted to students’ cell phones. Students are strongly encouraged to register for *My Commnet Alert*.

5. **ATTENDANCE / ILLNESS / INJURY POLICIES**

Radiology students will enhance their education by attending all scheduled classes and clinical practice. Punctuality is important since class lectures establish the objectives, instructions, and learning experiences for the day. Instructors cannot repeat an entire lecture for a latecomer. Absenteeism for emergencies, accidents, or illnesses requires an evaluation by the Director and faculty of the Associate Degree Radiologic Technology Program. Excessive class and clinical misses adversely affect the learning experiences. Students with excessive absences may not meet the educational objectives of the program. It is the responsibility of the student to communicate with the instructor about information or class content missed as a result of the absence. Withdrawal from the program can occur. Students may be placed on probation for violation of program attendance policy.

a. Every class and clinical session offer the student an opportunity to learn. Therefore, students are expected at all scheduled classes, clinical, & post conferences. In the event of an illness, students are allowed two absences from class and two from clinical during the fall & spring semesters. Students are allowed only one absence from class and one from clinical in the summer session. The excused absences are not given for students to take off time, but instead are used to provide students with flexibility in the event an illness should occur. Since one never knows when an illness will occur, faculty encourage students to attend all classes and clinical as scheduled. Tardiness, not attending post conference, and absenteeism are all considered when reviewing student’s participation in the program. Combinations of tardiness, leaving early, and absenteeism can result in the student placed on probation or a faculty-initiated withdrawal from the program. Unless there are extenuating circumstances, a combination (tardy, absent, not attending post conference) of 4 occurrences may result in withdrawal of the student. Any illness or injury that results in the student having an excessive amount of absences may result in dismissal.
of the student if the educational objectives are not met. DO NOT ABUSE THE SICK TIME. Every situation is considered on a case by case basis.

b. If the unfortunate event of an illness occurs, & if the student exceeds their two sick days and they are allowed to continue in the program, the student must make up all clinical time missed after two sick days are used. The Director schedules the make-up time. All sick time over the two days must be made up prior to the start of the next semester and in accordance with the schedule established by the Program Director.

c. A student missing an entire clinical rotation may be required to make up at least but not restricted to one day of that experience even if the time missed does not exceed the two allowed absences. It is not the room that is the assignment; rather it is the skill and objective that is considered. All are considered on a case-by-case basis.

d. Good attendance and arriving on time for scheduled assignments are professional traits employers seek when hiring radiographers. All missed clinical time affects your grade. As stated above in 4A, missed clinical is defined as: Being absent for the entire day or part of the day, arriving late for clinical, and not attending post conference. Each of the preceding is considered an occurrence and will be indicated on the student’s clinical evaluation.

e. When a student will be absent from clinical, they are required to call their clinical instructor and when applicable, the affiliate, to report the absence. The call is to be made by 8:30 a.m. Failure to call is considered an unexcused absence and the student will make up the time missed. If an affiliate is not available to take the call, the student is to call either the Program Director or Clinical Coordinator. Both instructors have voice mail.

f. Punctuality is required since it affects the health and safety of the patients. It is disruptive to the patient exams when a student that is late for clinical reports in the middle of the procedure. Promptness is an ethical trait that most employers seek in a new employee. There are many procedures in which patients have undergone a preparation for the procedure. Some patients have taken time off from work and will be returning to their job upon completion of the exam. These patients would like to complete the exam in a timely manner and without delay. Tardiness may disrupt the procedure. On the first two occurrences the student is late the instructor will issue a verbal warning. On the third offense the student will receive a written warning be dismissed for the day and make up the time. The student will also be required to meet with the Program Director. In the event the student is late a fourth time, the student will be withdrawn. All incidents of tardiness affect the student's clinical grade.

g. Excessive misses from class or clinical will be considered on a case-by-case basis. A student that habitually violates the attendance policy will be withdrawn for failing to meet the educational objectives of the program. Habitual violation is considered to be more than two offenses during the program.
h. Post conference is held at the college as scheduled. Not attending post conference affects your clinical grade. See 4 A & D above.

i. Students that injure themselves or experience a sudden illness during clinical practice are to Report all injuries to the clinical instructor. (See procedure and form located in Appendix C. p 92-93).

j. Students that have an illness or are fatigued should use caution when reporting for clinical. Remember patients are weak. It is not in the patient's best interest to be exposed to other diseases. Students that are fatigued are also putting patients at risk. Fatigue affects one’s cognitive abilities. Students that are ill or tired may be sent home by the instructor. The clinical instructors will be guided by the policies of the affiliates. (see section 23)

k. Any change in the health status of the student requires that they notify the Clinical Coordinator and Disability Services. This includes any medication the student may be taking. Remember many medications can impair movement, judgment, thinking, and vision. A student on medication may not practice safely. Each case will be considered on an individual basis and many require consultation with the student's physician and the submission of medical reports.

l. The NVCC Radiologic Technology Program does allow students to observe religious holidays. The student should contact the Program Director to request time off to observe a religious holiday. Missed clinical time may have to be made up depending on the amount of time the student misses from clinical. This is determined on a case by case basis.

6. WITHDRAWAL

a. The faculty may request the withdrawal of a student having an unsatisfactory academic and clinical record. Students can be withdrawn at any time if they are determined to be clinically unsafe. A student that is withdrawn for unsafe clinical is also withdrawn from the radiology class. The student will be given a grade of W for the class. (See Section 10 for unsafe clinical)

b. The faculty may request the withdrawal of a student having excessive absenteeism or tardiness.

c. The faculty may request the withdrawal of a student for improper conduct in the classroom or clinical, including but not limited to academic dishonesty.

d. The faculty may request the withdrawal of a student for repeated violations of the dress code.
e. The faculty may request the withdrawal of a student that does not maintain either patient or affiliate confidentiality. (An affiliate is any facility that accepts students for educational or clinical experiences)

f. Clinical affiliates have the contractual right to request the program remove a student from their facility. Reasons a student may be removed include but not limited to breach of patient confidentiality, possession of business documents outside the facility, theft of hospital property/supplies, improper use of cell phone, disruptive/rude behavior with patients and/or staff, argumentative behavior, and interfering with patient throughput. The removal of a student from a clinical affiliate can result in dismissal of the student from the program.

g. Upon withdrawal from the program the student is to return dosimeter badge and hospital ID's. Failure to do so affects your withdrawal status especially if the student leaves in good standing.

h. Documented medical reasons that require an extended time period for recovery (ex. therapy or the achievement of a medication level) may result in the withdrawal of the student, regardless of the amount of course time that the student has completed. Every situation is different and considered on a case-by-case basis. Faculty will be guided by the time available between semesters as well as the ability of the student to complete the educational objectives prior to the start of the next semester. When possible, faculty will make every attempt to provide reasonable accommodations for the student with a documented illness. Medications that interfere with cognitive & psychomotor abilities will prevent the student from completing the course and will result in withdrawal.

7. VOLUNTARY WITHDRAWAL
Students desiring to withdrawal voluntarily from the Radiologic Technology Program should write a letter to the Director of the Program in order to clarify status and records. An exit interview will be scheduled with the Program Director upon receipt of the resignation. Readmission requests are determined by faculty vote.

The NVCC academic calendar identifies the last date for a student to initiate withdrawal from a course. A student that remains in the program past the student-initiated withdrawal date will be given the grade they have earned. Any assessments missed because of withdrawal after the deadline will be factored into the calculation of the final course average. For example, a student withdraws after the deadline and does not take the final exam. The grade for the final would be 0 and averaged as outlined in the course syllabi.

8. PROGRAM SEVERANCE
Students are permanently severed from the radiology program without the possibility of readmission in the following circumstances; committed academic dishonesty, withdrawn for unsafe clinical, failing clinical grade, unsuccessful academic progress after readmission a second time.
9. **GRADING POLICIES**
   a. An explanation of semester hours & academic load is stated in the Naugatuck Valley Community College Catalog and Student Handbook.

   b. The faculty does not curve grades nor allow students to do extra credit assignments. The grading system used by program faculty is as follows:

<table>
<thead>
<tr>
<th>Average</th>
<th>Grade</th>
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<tbody>
<tr>
<td>94.5 - 100</td>
<td>A</td>
</tr>
<tr>
<td>89.5 - 94.4</td>
<td>A-</td>
</tr>
<tr>
<td>86.5 - 89.4</td>
<td>B+</td>
</tr>
<tr>
<td>83.5 - 86.4</td>
<td>B</td>
</tr>
<tr>
<td>79.5 - 83.4</td>
<td>B-</td>
</tr>
<tr>
<td>76.5 - 79.4</td>
<td>C+</td>
</tr>
<tr>
<td>73.4 - 76.4</td>
<td>C</td>
</tr>
<tr>
<td>69.5 - 73.3</td>
<td>C-</td>
</tr>
<tr>
<td>66.5 - 69.4</td>
<td>D+</td>
</tr>
<tr>
<td>63.5 - 66.4</td>
<td>D</td>
</tr>
<tr>
<td>59.5 - 63.4</td>
<td>D-</td>
</tr>
<tr>
<td>59.4 and below</td>
<td>F</td>
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The student must receive a satisfactory clinical evaluation (grade of "C") to remain in the program and progress to the next semester in Radiologic Technology. The criteria for satisfactory performance are as follows:

- 33% of Clinical Competency Average
- 33% of Professional Behavioral / Clinical Skill Evaluation Grade
- 33% of Clinical Exams and Quizzes

**EXAMPLE:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Grade</th>
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<tr>
<td>Clinical Competency Average</td>
<td>89</td>
</tr>
<tr>
<td>Test/Quiz Average</td>
<td>70.6</td>
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<tr>
<td>Behavior/Skill</td>
<td>85</td>
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<tr>
<td><strong>Total</strong></td>
<td>81.5</td>
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Students must achieve an average 73.4 in each of the three categories identified above to demonstrate competence. An average <73.4 in one category will result in withdrawal even if the total average is passing. *Students must remember competence is to be achieved in all areas.* In the example above, the student has not successfully completed the clinical course despite the 81.5 average. The student earned a 70.6 average in tests/quizzes. A grade of F will be issued.

f. The required minimum number of clinical competencies is to be completed on time. Failure to satisfactorily complete the competencies will result in withdrawal of the student. Failing to complete all required competencies may result in a student be declared not Registry eligible. Complete all competencies when possible. Clinical faculty will document students that decline to perform competencies or do not aggressively pursue procedures. The college and faculty are not responsible for a student that does not complete all competencies in the 22 months, especially when the student has declined procedures.

g. As previously stated, successful completion of a clinical competency requires a minimum grade of 80. Students not successfully completing a competency may be given two additional opportunities to complete the competency. A student not successfully completing a competency after three attempts is withdrawn from the program. The first grade earned is used to calculate the clinical average. The number of competencies to be completed is identified each semester. Faculty will review the purpose of a competency-based education and the evaluation process during orientation. Failure to complete at least one assigned competency (each semester) with a grade of 80 or better will result in withdrawal and the student issued a grade of F.

h. The student's progress in the clinical area will be reviewed at intervals and at the end of each term. The student that receives an unsatisfactory clinical warning is expected
to seek an immediate conference with the Director of the Radiologic Technology Program in order to develop a plan of study and to help improve their clinical performance. Remedial help is available for students. It is the student’s responsibility to seek assistance or clarification.

i. For qualification as ARRT Registry eligible, written exit competencies must be successfully completed with a minimum grade of 75. Students not achieving a minimum grade of 75 will be given a grade of incomplete for the course and will no longer be considered eligible to sit for the ARRT exam. Students will be allowed to retake the written exit three times. If the student is unsuccessful on the third attempt the grade for the course will be changed to a grade of “F”.

j. Instructors may also give grades of “I” for incomplete. Incomplete is given in extenuating circumstances such as missed clinical time not made up. ALL incomplete grades must be satisfactorily completed according to program policy and requirements prior to the start of the next semester. Failure to meet all requirements will result in a grade of “F” and withdrawal from the program. A grade of F will be given when a student is withdrawn from the program for unsafe clinical.

10. PROGRAM CURRICULUM

a. The program is structured in a sequential learning pattern. All courses must be taken in the order outlined in the program’s curriculum and successfully completed by the assigned semester. General education courses may be taken earlier. Any change in the order can result in dismissal of the student from the program. Registration for the appropriate classes as outlined is required. Meet with your faculty advisor each semester to avoid taking the wrong class. It is possible that a student could get to the end of the program and discover they took the wrong class or are missing a class. This can prevent the student from graduating and sitting for the Registry. ARRT rules require the applicant sit for the Registry after completing all terminal degree requirements. If you have questions concerning your courses please confer with your faculty advisor. Check the college catalog to ensure your elective meets the college core requirement.

b. Students are urged to register and pay for classes on time. This will avoid not getting the class or the schedule that best fits your studies. It will avoid the computer system from removing you out of a section for non-payment.

11. CLINICAL EDUCATION

a. Students are required to maintain a satisfactory and safe level of clinical practice at all times. Radiography students will have the supervision of a qualified staff technologist (radiographer) at all times, through direct or indirect supervision as outlined in #12 Clinical Supervision. A qualified technologist (radiographer) is defined as a technologist (radiographer) who is certified by the ARRT in
radiography and holds a current license in radiography with the State of Connecticut D.P.H.

b. Students are to report promptly for their clinical assignments in the morning, and when returning from lunch and breaks. The earliest the student may report to clinical is 20 minutes before the scheduled start time. Students are to be in their assigned rooms at 8:00 a.m. Students should not go to clinical affiliates to visit with staff that are working.

c. Students are expected to practice proper hand hygiene and follow Standard Precautions at all times. Hands are to be washed before and after every case. Patients will find it comforting to see the student wash their hands in front of them at the start of the case.

d. Lunch and breaks are to be taken with permission of the clinical instructor or technologist.

e. Students are to maintain patient confidentiality at all times. The unauthorized reading of a patient's chart or discussion of their illness/history is a violation of the Patient's Bill of Rights and HIPAA. Violation of confidentiality can result in dismissal from the program and is punishable by a term in prison, fine, and or both. Personal medical information of patients is confidential. This includes name, DOB, diagnosis, prognosis, procedures performed, and treatments. The basic rule to remember for patient confidentiality is that if you learned it during your clinical experience you cannot discuss it. This includes patients that you personally know. Possession of affiliates document(s) and property outside of the site is grounds for dismissal.

f. There are several clinical affiliates. The students will be assigned to the affiliates by the clinical coordinator. Please do not disrupt the workflow at the affiliates. They have generously allowed you to attend. Disruptive behavior can ruin an entire affiliation for everyone.

g. Students are guests of the affiliates. The student is subject to all rules and regulations of the affiliates including parking and smoking policies. Several affiliates have smoke free campuses. The business of the affiliates is confidential and should not be discussed at the other clinical facilities. Breaching affiliate business is grounds for dismissal from the program.

h. No student is permitted to participate in any strike or job action while at the clinical facility. If at any time there is a strike or job action, the student is to check with program faculty for further instructions.

i. Students must record performed clinical procedures in Trajecsys clinical logs.
j. Students are required to use/order anatomical side markers from the vendor approved by the program. This ensures consistency among the students and assists the affiliates in recognizing the marker is a student marker. Only markers purchased from the program’s specified vendor are allowed.

k. Students are not allowed to have more than 40 hours per week of class time & clinical contact. Students wishing to put in extra time are to receive permission from the Director. Extra time may only be done during the semester and when an instructor is assigned.

l. A staff technologist must check all radiographic procedures before the patient is discharged or the images are sent to PACS. The technologist's name that approved the case is to be documented according to facility policy for affiliates that allow student access to the medical record.

m. Recording of procedures in the clinical record is done using the medical record number, charge number or exam number. The codes found in the clinical logs are to be used as outlined.

n. All repeat radiographs are to be done under the direct supervision of a technologist, even if you have demonstrated competence. Any procedure in which the student repeats a radiograph is to be documented in the clinical record book. Above the exam performed the student is to write R = technologist's initials.

Any student found to performing a repeat without technologist supervision will be given a written clinical conference slip. If, during the program, a student has a second occurrence of repeating a procedure without technologist supervision the student will be immediately withdrawn from the program. There are no exceptions. In the event a technologist instructs you to repeat without supervision the student is to politely refuse and immediately seek assistance from their clinical instructor.

o. The level at which the student participated in the radiographic procedure is to be recorded as outlined in the clinical record book. The supervising technologist’s initials are recorded. All mobile exams must be done with a technologist.

p. Students are not allowed to bring other school material to clinical. Studying for other classes, while in clinical, is not appropriate. Only clinical material may be brought to the affiliates.

q. Students should remember that faculty will be teaching according to the accepted standards, Scope of Practice, and Code of Ethics. Faculty has different approaches/methods in which they will perform procedures. The variety of approaches is a benefit to the student. It provides the student with an opportunity to evaluate various approaches to imaging. Regardless of the methodologies instructors use, the
goal is always to perform radiographic procedures with safety, efficiency, compassion, and within acceptable standards of practice. Students are to practice according to the instruction received by faculty. Students are encouraged to seek clarification from instructors (not in front of patients or staff) when conflict/questions in performing radiologic procedures occurs. The instructor has the final say in all matters concerning the performance of procedures. The instructors’ expertise should be utilized to the maximum capabilities for a rewarding clinical experience.

r. Students may be given the opportunity to be employed at one of the program’s clinical affiliates or at another imaging facility as a technical assistant/aid. Any experiences the student participates in or receives while employed cannot be counted towards the program’s educational experiences. Work and school are two distinct separate entities. The program and college assume no responsibility for student during employment.

s. Students will be given their clinical assignments at the start of the semester. If someone calls the assignment looking for a student the faculty will take the call, not the student. Faculty WILL NOT confirm you are at that location. They may, at their discretion, take the message and notify the caller they will attempt to locate you. If they choose not to take a message the caller will be referred to campus police. Campus police will then attempt to locate the student. This is required by college policy under federal privacy acts. If this is unacceptable to the student, it is recommended the student consider providing their clinical instructor with a written release that states the instructor may inform a caller that you are assigned to that location. The written release must be submitted every semester to the clinical instructor. Remember a cell phone is not allowed during clinical experiences. Therefore, a phone that must be answered in clinical is unacceptable.

t. Problems with hospital employees are to be brought to the immediate attention of the clinical instructor. DO NOT CONFRONT OR ARGUE WITH ANY HOSPITAL EMPLOYEE.

u. Students should use professional discretion when questioning actions or decisions. NEVER ARGUE WITH STAFF, CLASSMATES, OR FACULTY IN THE PATIENT CARE AREA.

v. All students must complete MRI Safety Education and a MRI Screening Form, which will be reviewed by the Clinical Coordinator and/or Program Director. Students are mandated to notify the program should their status change, from what they initially filled out at the time of the MRI screening form.

w. CEU attendance maybe considered by program officials as a replacement to clinical hours, which will be based on the following criteria: (1CEU = 1 clinical hour/ a maximum of 7 hours/ per semester), CEU events must be approved before attendance and proof of attendance is mandatory.
12. CLINICAL SUPERVISION
   Program Guidelines for Clinical Supervision of Student

   CLINICAL STAFF SUPERVISION (DIRECT/INDIRECT)

   POLICY
   Radiography students will have the supervision of a qualified staff technologist (radiographer) at all times, through direct or indirect supervision as outlined in the procedures below. A qualified technologist (radiographer) is defined as a technologist (radiographer) who is certified by the ARRT, in radiography and holds a current license in radiography with the State of Connecticut D.P.H.

   PROCEDURE
   - Each student will be assigned to work under the direct or indirect supervision of a qualified staff technologist (radiographer).

   CLINICAL STAFF DIRECT SUPERVISION
   - A student must have direct supervision while observing, practicing, or performing an exam in which he/she has not yet attained competency.
   - **Direct Supervision** is defined as a qualified technologist (radiographer) overseeing all activities associated with that radiographic procedure including:
     - The qualified radiographer reviews the procedure in relation to the student’s current level of expectation.
     - The qualified radiographer evaluates the condition of the patient in relation to the student’s knowledge.
     - The qualified radiographer is present during the conduct of the procedure.
     - The qualified radiographer reviews and approves the procedure and positioning.
     - In order to maximize radiation protection, all unsatisfactory radiographs must be repeated under the direct supervision of a qualified radiographer.
   
   *** If a student technologist repeats an image(s) without a qualified technologist present the clinical instructor will notify the clinical coordinator who will meet with the student to implement disciplinary actions.

   CLINICAL STAFF INDIRECT SUPERVISION
   - After a student has attained competency in a particular exam then he/she may perform that exam with indirect supervision.
   - **Indirect Supervision** is defined as a qualified radiographer immediately available to assist a student, regardless of the level of the student’s achievement or competency. Immediately available is interpreted as the presence of a qualified radiographer adjacent to the room or location where a radiographic procedure is being performed. This availability applies to all areas where ionizing radiation is in use.
   
   9/19/17
   Reviewed: 11/06/17, 02/20/18, 08/08/19, 08/17/20, 07/28/21
13. **UNSAFE CLINICAL**

During clinical, instructors will be working with each student, evaluating their clinical skill level. As a result of faculty observations, a student may be identified as being unsafe during clinical practice. Unsafe clinical includes, but not limited to: poor radiation protection/shielding; failure to document/question the possibility of pregnancy, high number of radiographic repeats, performing wrong radiologic procedures, improper universal precautions, & improper use / lack of using anatomical side markers. Based on their observations, the faculty will complete a Student/Faculty Conference Form identifying the incidents. The student will be required to confer with the Program Director.

Faculty will give clinical warnings if the student cannot consistently demonstrate skills or meet the expected educational objectives. Repeated warnings can place the student on a probationary status. *Probationary status indicates to the student another omission of the same skill, error, or a repeat of the behavior/violation of program policy will result in withdrawal.* Students receiving a warning should confer the faculty and Program Director to develop a plan for remediation. A student will not be on probation or given a warning without their knowledge. A student that receives a warning for unsafe clinical is to seek immediate assistance from the program’s Retention and Remediation Specialist (RRS).

Students should remember that the observations of the faculty are based in their professional judgment and documentation of incidents. In making their determination faculty is guided by radiologic practice, affiliate radiologic procedures, and Radiographer’s Scope of Practice / Code of Ethics. While faculty may intervene during a radiologic procedure prior to the actual exposure, faculty considers this as a radiographic repeat, despite the fact that the actual radiograph taken was successfully performed.

Students that are withdrawn from clinical due to safety concerns are not allowed readmission into the program.

14. **DRESS CODE**

The dress code for the Radiologic Technology program is as follows:

a. White lab coat to be worn at all times, except under the lead apron, white uniform, shoes neat and polished. If sneakers are worn, they are to be all white and free of color stripes, logos, and laces. Open toed shoes are not allowed. White socks. Navy blue scrubs. Tee shirts may be worn under the blue shirt. They must be all white or blue. During cold weather, students may wear white or navy-blue turtleneck shirt under the scrub top. The uniform requirements were forwarded to the student prior to the start of the program. Students may only wear the uniform as identified above. The uniform is to be worn whenever attending clinical.
For purposes of student and patient safety the following also applies during clinical:
Long hair is to be tied back and should not fall in front of the student's face while performing radiographic procedures. Except for a wedding band all other jewelry is not allowed. Only stud type earrings are acceptable. *Earrings that dangle or hang lower than the lobes are not allowed.* No more than one earring per ear is allowed. No other visible body piercing allowed and must be removed. It is NOT acceptable for visible body piercing to be covered by a bandage. No unnatural hair color allowed. Necklaces and bracelets are not allowed. Faculty will instruct the student to remove any jewelry that violates program policy. Tattoos are to be covered. Tattoos on the arm will require the student to wear a long sleeve navy blue tee shirt under the scrub top. Tattoos on neck that are visible are to be covered by band aid. Remember patients are ill. Smells/fragrances may bother patients and staff. No perfume, cologne, or scented skin lotions are allowed. Skin lotions are allowed to prevent chapping but they must be unscented. If clinical faculty detects a fragrance you will be sent home. The CDC has issued guidelines on hand washing and finger nails. The fingernails are to be cleaned, trimmed, and free of polish. Long nails may scratch a patient. Chipped manicured nails breed microorganisms. A watch with a second hand is required. Cell phone is not allowed. Make-up should be kept to a minimum.

b. Sweaters are not to be worn during clinical. They are another medium for transfer of infections.

c. Studies demonstrate that the uniform may cause the spread of infection. It is expected that a clean uniform will be worn to clinical.

d. The student will purchase two uniforms upon admission into the program. The uniform scrub shirt must have NVCC embroidered over the left breast pocket. A third uniform will be required when the student begins their second year.

e. Hospital I.D.'s are to be worn with the uniform and lab coats at all times unless directed by the instructor.

f. Failure to follow dress code policy will result in an immediate warning. A second offense will result in dismissal. Clinical instructors have the final say concerning the dress code. This is the only acceptable dress code regardless of what anyone may tell you.

g. When assigned to the surgical suite, you are to wear the proper surgical garments. You are not required to change scrubs every time you enter/exit the surgical department. You are required to remove masks and shoe covers. The students assigned to surgical suite may report for clinical without wearing the program’s uniform. The student MUST have the uniform with them and carry it into the hospital. Students that do not wear their uniform into clinical must be appropriately attired. No shorts, tee shirts, tank tops are allowed. Remember you are representing the program and college.
15. LEARNING RESOURCES

NVCC students have two excellent resources to assist students with tutoring, study tips, note taking tips, math skills, and writing papers. The Academic Center for Excellence (ACE) is located in Ekstrom Hall E500. Their hours of operation are posted in the college web site.

http://www.nvcc.commnet.edu/Student-Life/ACE-Tutoring

The Radiologic Technology Program provides a Retention/Remediation Specialist (RRS), this learning resource is there to assist students in developing their radiologic technology skills and study habits. Students are strongly encouraged to take advantage of the RRS availability.

The RRS is scheduled based on availability of college resources. Each semester the RRS will make a schedule and it will be made available to the students and posted in the classroom F-215. Students seeking an individual appointment are to email the RRS directly requesting an individual appointment. The email of the RRS is located under the email tab in BlackBoard.

(Revised 1/29/22)

16. REMEDIATION

Students that are issued Performance Improvement Plan (PIP), conference slip by clinical faculty recommending remediation are required to meet with the RRS at the next available date. The student is to bring the (PIP) conference slip to be signed off by a Program Official. The student will be assigned remediation to be accomplished under the supervision of the RRS. The student will provide the RRS with the PIP/conference slip.

Students that have unsuccessfully completed a competency on the second attempt are to seek immediate remediation with the RRS before being allowed to attempt the competency a third time. After remediation with the RRS, the student will then simulate the procedure with their assigned clinical instructor. If the clinical instructor determines the student still cannot demonstrate under simulation the procedure the student will be referred back to the RRS for further remediation. If the instructor, after simulation, determines the student is prepared to be tested again the student will be allowed to perform the procedure. The student must successfully complete the exam on the third attempt. Unsuccessful third attempts will result in the immediate withdrawal of the student from the program.

(Revised 1/29/22)

17. RADIOLOGY LAB/CLASSROOM

The Radiology lab is used only by the Radiologic Technology Program. A program official may utilize the lab with other health care programs for simulation without the use of ionizing radiation.
• Please see the Radiation Safety section for policies concerning Radiation Safety policy in the lab.

a. Do not force the tube crane. If there is resistance moving the tube, please stop what you are doing and seek program faculty assistance.

b. There is a phone located on the instructor’s desk in the front of the room. Campus police can be contacted by calling 8112.

c. Students are to report any problems, malfunctions, or safety issues. This includes electrical problems, exposed wires, tube crane issues etc.

d. In the event of an emergency that requires immediate evacuation, when leaving the classroom, the exits may be located by turning left or right. If you turn right, the exit is at the end of the hall. Proceed down the stairs and exit the building on level one.

   If going left, proceed to the exit at the end of the hallway. Exit the stairwell to level one to exit.

e. Do not use elevators during an emergency.

f. The radiology lab is not latex free. There may be some equipment that contains latex. Students that have latex allergies are to use caution or ask faculty when working with equipment.

g. The Program Director has a sharps disposal box locked in his office. Students are not allowed to practice with any sharps unless faculty is present.

h. In the event a student is injured, an incident report must be completed. Please notify the Program Director of any injury.

18. ALLIED HEALTH COMPUTER LAB

The Allied Health Computer Lab is located in F202. Students are to be respectful of all students in the lab. Noise is to be kept to a minimum. Appropriate language is to be used at all times. The computers are used on a first come first serve basis. There are numerous software packages available to assist the radiology students. Students will need to bring their own headphones to the lab.

19. RADIATION PROTECTION

Ionizing radiation can be harmful to an individual.
a. A student is to practice proper radiation protection at all times. Students should not participate in an exam that results in unsafe protection procedures. The use of fluoroscopy to perform routine radiographic exams (ex. spines, hips) is unacceptable, and the student is not to participate in the procedure. Students must not hold image receptors during any radiographic procedures and should not hold patients during any radiographic procedure when an immobilization method is the appropriate standard of care. Students are expected to assist in moving patients during fluoroscopic procedures (ex. GI, BaE). ALL patients are to be shielded. A shield is to be worn by the student during mobile exams and fluoroscopy.

b. It is the student's responsibility to report to the clinical practicum with their TLD. If a student reports to clinical without their TLD, they will be sent home to get the badge. The time missed retrieving the badge will be made up before the semester ends. The college maintains the students' badge reports. Monitoring reports are kept on file in the Director's office.

c. Any TLD that is lost or damaged must be reported to faculty immediately. Faculty will replace the TLD as fast as possible.

d. Students are to review, initial, and date their quarterly/monthly radiation reports.

e. The TLD is property of the vendor and is to be returned upon termination in the program.

f. The TLD is to be worn outside the lead apron at the level of the collar.

g. A student over the age of 18 is allowed an annual exposure of 50 mSv or .05 Sv (5000 mRems or 5 rem). A student that is 18 years of age is allowed an annual exposure of 1 mSv or .001 Sv (100 mRems or 0.1 rem). In the unlikely situation that a student exceeds their quarterly/annual limit, they are no longer allowed to receive any further exposure until the cumulative lifetime dose equivalent is less than the cumulative limit. This may result in the withdrawal of the student if clinical objectives cannot be met. The student will be referred to a Health Physicist and/or medical physician for further counseling. A student that exceeds 50 mrem or greater in a report period will meet with the Program Director.

19.1 LAB RADIATION SAFETY POLICY:

The following are the rules for usage of the radiology lab at NVCC.

- Students are not allowed under any circumstances without an accompanying NVCC Instructor/ARRT technologist present.
- Exposures will only be made on the phantoms or other inanimate objects (i.e. Pixy mannequin).
• All students must be inside the control room area and all doors completely closed when exposures are being taken.
• Any student wishing to enter the lab will use the control room door only and should knock before entering.
• All students and personnel must wear dosimeter badges while attending lab.
• All dosimeters are to be worn at collar level.
• The general pregnancy policy as outlined in the current Radiography Student Handbook applies to the lab.
• Mishandling or deliberate destruction of any equipment or device in the lab will be held accountable and discipline in accordance with violation of this policy.
• When making exposures the doors from the x-ray room to the hallway and classroom shall be locked.

NOTE: Violation of any of these rules will result in the following: Immediate suspension from the Radiography program. This is due to the potential harm of ionizing radiation to the human body and radiation safety standards must be maintained at all times.

Open Lab Sessions

• Lab sessions allow students the time to practice radiographic procedures.
• Lab sessions will be scheduled during the week Monday through Friday for a designated time period throughout the semester.
• Students should make time to attend an open lab session to improve their skills.
• Open lab sessions do not replace radiographic procedure or exposure principles scheduled labs.

20. PREGNANCY

There is risk to the unborn child if exposed to radiation. It is strongly recommended, for the health of the fetus, that a student becoming pregnant while enrolled in the program notify faculty and the Program Director. Disclosure of the pregnancy is voluntary. The Radiologic Technology Program follows the U.S. Nuclear Regulatory Commission (NRC) – Regulatory Guide 8.13. The NRC states the declared pregnant women is one that voluntarily informs in writing of the pregnancy and the estimated date of conception.

The voluntary declaration of pregnancy is critical since the radiation dose to the fetus needs to be monitored. The annual dose to the occupational worker is 50 mSv (5 rems or 5,000 millirems) per year. The maximum allowed dose to the fetus for the entire gestational period is 1/10 that of the occupational exposure which is 5 mSv (.5 rem or 500 millirems). The Director will report the pregnancy to the clinical faculty and affiliate. The affiliates will be informed since they are the licensees of the radiographic equipment.

“The NRC regulations and guidance are based on the conservative assumption that any amount of radiation, no matter how small, can have a harmful effect on an adult, child, or
unborn child. This assumption is said to be conservative because there is no data showing ill effects from small doses. Although it is known that the unborn child is more sensitive to radiation than adults, particularly during certain stages of development, the NRC has not established a special dose limit for protection for the unborn child of the undeclared pregnant woman. Such a limit could result in job discrimination for a woman of childbearing age and perhaps in the invasion of privacy (if pregnancy tests were required) if a separate regulatory dose limit were specified for the unborn child. Therefore, the NRC has taken the position that special protection of the unborn child should be voluntary and should be based on decisions made by workers and employees who are well informed about the risks involved.” (8.13 pp6).

Upon declaring pregnancy, the faculty will provide the student with the appropriate NRC Regulatory Guides concerning occupational exposure during pregnancy. Additionally, the student will be provided the opportunity to consult with a radiation physicist. The faculty will attempt to answer all questions or refer to other individuals to seek clarification.

It is the student’s decision to continue in the program. NRC 8.13 states as follows: “In order to decide whether to continue working while exposed to ionizing radiation during her pregnancy, a woman should understand the potential effects on an embryo/fetus, including those that may be produced by various environmental risks such as smoking and drinking.” (8.13 pp.3)

Additionally, a student may withdraw their declaration of pregnancy at any time. A withdrawal of pregnancy does change the dose limits to the student. A withdrawal of a declaration of pregnancy must be in writing to the Program Director.

Should the student decide to stay, the faculty will take reasonable, appropriate measures in an attempt to keep the radiation exposure as low as possible. However, the radiation dose the student will be exposed to cannot be guaranteed. The student will be required to complete all clinical assignments as scheduled in order to fulfill the educational objectives of the program. A student that decides to withdraw, due to the pregnancy, leaves in good standing provided they withdraw according to program policy. The student should refer to the Radiologic Technology Program Handbook regarding a withdrawal in good standing and for readmission into the program.

Depending on the date of the declaration of pregnancy, the faculty may, with the student’s permission, schedule clinical assignments with a potential risk of exposure to the end of the semester. This is done on a case by case basis depending on the time in the semester, the impact on other assignments, and fulfillment of all clinical course objectives/rotations. The declared pregnant student still must meet all course objectives and clinical assignments in each semester. The faculty cannot move an assignment to another semester.
Copies of the complete NRC report are available to any interested student upon request. The faculty will make every attempt to inform students about pregnancy and radiation exposure. The faculty will try to work together with the pregnant student to reduce the radiation dose. This however cannot be guaranteed.

21. **CELL PHONES**

The college policy concerning cell phones is as follows:

Cell phones are allowed in the class only if they are turned off or are turned to a silent mode. Under no circumstances are cell phones to be answered in class. Students who ignore this policy may be asked to leave class. When there are extenuating circumstances that require that student be available by phone or pager, the student should speak to the instructor prior to class, so that together they can arrive at an agreement concerning the device.

In addition to the above policy, students MAY NOT use cell phones during clinical assignments. This is policy of the hospitals not only for students but also for the hospital staff. Cell phones may not be used at any time to take pictures in a clinical affiliate. The first time the student is found to have their cell phone with them (i.e. pockets) during the clinical experience the student will receive a warning. The second offense the student will be dismissed from the program. Students may only use their cell phone during lunch.

During exams cell phones may not be in student’s pockets and at the discretion of the instructor, the students may be asked to place the phones in another location out of reach of the student. When taking exams/quizzes, all cell phones will be turned off unless the faculty gives permission to leave the phone on. Cell phones that have a calculator cannot be used during an exam. Students are expected to purchase a separate, non-programmable calculator to use in the program. Cell phones may not be on the table/desktop during the review of exams.

Texting during class is not allowed. Texting during class is disrespectful to the instructor. Students caught texting during class will be asked to leave.

22. **INFECTIOUS DISEASE/BLOODBORNE PATHOGEN**

Students may not refuse to perform any radiographic procedure involving patients that have an infectious disease. Patients have the right to be treated without discrimination, regardless of the nature of their illness. Any student refusing to perform a procedure due to a patient's illness will be withdrawn from the program. There are exceptions. If you have not had chicken pox or the patient is in AFB isolation. AFB isolation occurs when the patient is in their room. AFB isolation does not occur in the radiology department.
a. *Students that come in direct contact with blood or body fluids are to contact faculty/instructor immediately.* The Clinical Instructor or Director will complete an incident report.

b. According to Standard Precautions the student should wear the appropriate protective apparel when performing ALL radiographic procedures. It is the student's responsibility to take the appropriate measure to reduce the possibility of exposure. Students were required to purchase protective eye equipment. The eye glasses are to be with the student at all times.

c. There may be an occurrence when a student is exposed to an infectious disease (chicken pox, measles, TB) and is not allowed in clinical until the student is tested for immunity. The student will not lose sick time for days missed due to an exposure of an illness. Each case is considered on an individual basis. Faculty expects that the student will take the necessary steps to expedite their return to clinical. If the faculty determines the student delayed their return, the time missed will be made up.

d. Hands are to be washed before and after each case and, if possible, washed in front of the patient. Equipment is to be cleaned after each case and clean linens applied in front of the patient.

e. Sharps should not be recapped and are to be disposed according to facility protocol and in the appropriate container.

f. Patient charts and the x-ray requisition are to be reviewed for infection control warnings before bringing the patient into the radiographic room.

g. Isolation gowns and gloves are not worn outside the radiographic room.

i. Invasive procedures require the appropriate barriers between the student and the patient.

23. **COMMUNICABLE DISEASES**

Standard Precautions are used to control the spread of microorganisms. There is also the possibility the student may spread an illness to the patient. Students that are ill should use caution when reporting to clinical. The student has an ethical responsibility to report illnesses. Students are to notify the Program Director, Clinical Coordinator, or instructor when they have a known illness. The reporting is for the protection of the patient, classmates, and staff. If a student reports to clinical ill, faculty will be guided by current medical practices and the protocols of the facility the student is assigned. Any time missed beyond the allowed two sick days will be made up.

Examples (but not limited to) of contagious diseases that a student cannot report to clinical with are:
Conjunctivitis (pink eye), strep throat, chicken pox, active shingles, scabies, lice, gastroenteritis, influenza, TB, measles, mumps, fever, and rubella.

Many of the preceding illnesses require a period of recovery, as well as a time requirement the student must be on medication before returning. (i.e. strep throat 24 hours on antibiotic therapy). When returning to clinical the student will be required to submit a note from the treating medical provider that indicates the student may return to clinical. In some cases, the student may not have seen a physician. The student should use judgement before returning to clinical. In the event the student has not seen a medical provider faculty will follow the recommendations of medical experts, clinical affiliate policy, and/or health agencies (i.e. CDC) in determining if the student may participate in clinical experiences. For example, information shows that the student with gastroenteritis (Norwalk virus) is contagious 48 - 72 hours after the symptoms have stopped. The student should not provide health care to patients during that period (www.cdc.gov).

24. INCLEMENT WEATHER

In the event of inclement weather listen to local radio stations. Students are to report to class and clinical as instructed. If the college opens late, the student is to report to clinical at the time announced. DO NOT report to clinical if the college opens after 11:00 a.m. check your email prior to leaving. Faculty may send an email concerning activities planned.

25. ACADEMIC INTEGRITY & PLAGIARISM

At NVCC we expect the highest standards of academic honesty. Academic dishonesty is prohibited in accordance with the Board of Trustee’s Proscribed Conduct Policy in Section 5.2.1 of the BOT Policy Manual. This policy prohibits cheating on examinations, unauthorized collaboration on assignments, unauthorized access to examinations or course materials, plagiarism, and other proscribed activities. Plagiarism is defined as the use of another’s idea(s) or phrase(s) and representing that/those idea(s) as your own, either intentionally or unintentionally. Anyone who violates the Board policy may fail the course at the discretion of the instructor.
A student may not obtain a transcript notation of “W” in a course if there exists substantial reason to believe the student has engaged in academic misconduct in the course. A transcript notation of “W” will only be permitted for such students when the final resolution results in finding the student did not commit academic misconduct in the course.

Any student found to have violate the academic honesty policy will be withdrawn from the program without the possibility of readmission and given a grade of “F”.

Allied Health and Nursing students are entering professions that require academic, professional, and personal integrity. Students are expected to conduct themselves in a manner consistent with the standards of that profession and the program in which they are enrolled. Any violation of appropriate conduct will be dealt with according to the policies outlined in the program handbook, the NVCC College Student Handbook, and the Connecticut Community Colleges Board of Trustees Policy on Student Conduct.

26. SUBSTANCE ABUSE POLICIES

The Program requires that each student passes a Drug Test reports to Castle Branch before entering into clinical. Substance abuse is defined as the dependency on a chemical substance (ex., alcohol, prescription over the counter and illegal drugs), which creates psychological and physical dependency and alters the individual life style, health, behavior, personal relationships, performance, or financial situation.

The use or abuse of a substance by a student becomes a concern when it impairs functions and affects the individual’s well-being, professionalism and safety for self and patients.

If a faculty member identifies a student displaying signs of abuse, the student will be approached regarding the evidence of the problem and action taken. It is the discretion of the instructor to remove a student from the clinical setting that they believe may be impaired by drugs and/or alcohol withdrawal with a referral for therapy and rehabilitation will be done. Medical and psychiatric reports including successful rehabilitation must be submitted with requests for readmission.

The students are expected to be aware of and observe the Connecticut State Law that prohibits the purchase of alcoholic beverages by an individual under the legal drinking age.

Intoxication can lead to physical and mental illness, skill deterioration, etc. and in no way relieves the student from full responsibility for his/her actions.
Students often have complaints or issues during the enrollment in the program. Students should feel free to bring these concerns issues to the Program Director. If the issue is programmatic and does not involve a radiology course grade or clinical withdrawal the Program Director will investigate the student complaint and make every attempt to respond to the student within 5 business days. If the student is not happy with the Program Director’s response they may pursue the issue(s) with the Associate Dean of Health Sciences. Every attempt will be made to respond to the student within 5 Business Days. If the student feels the issue is not resolved they may appeal to the CEO and receive a reply within 5 business days. The Program Director will monitor the process to ensure timely resolution.

Other issues concerning the college are to be discussed with the appropriate department/division supervisor. Please consult the college catalog for further information concerning college departments.

Due to the uniqueness of an educational allied health program there are two mechanisms in place for the student to use if the student has a discrepancy with their academic or clinical progress/grade.

a. Prior to using the appeal, students should follow the chain of command if there are problems or questions concerning their grades or with faculty decisions. All issues should be attempted to be resolved with the appropriate faculty.

b. There are two distinct appeal processes. The first is called Academic Appeals. This process is used if the student disagrees or would like to dispute a grade in a class.

The complaint should start with the instructor involved.

INSTRUCTOR

ASSOCIATE DEAN OF HEALTH SCIENCES
Discussion occurs within 15 days – Instructor/Director responds within 10 days. If not resolved, written appeal to the Dean within 30 days of instructor’s decision. Due to the nature of missing clinical and class work, every attempt will be made to expedite the process.

ACADEMIC APPEALS COMMITTEE
Appeals Committee convened with a reasonable time period. Written response to student no more than 30 days.

COLLEGE CEO
Within 10 days of receiving Appeals Committee written statement of appeal made to the CEO. Decision of CEO is final.

c. The second process is called *Allied Health & Nursing Clinical Appeals and Violation of Accreditation Requirements*. This process is used if the student disagrees or would like to dispute a decision to withdraw a student from clinical or a grade received in the clinical or believes the program is violating accreditation requirements.

The complaint should start immediately with the instructor involved, and then proceed to the Program Director and then Dean of Health Sciences.

**CLINICAL INSTRUCTOR or COORDINATOR**

- [ ]

**PROGRAM DIRECTOR**

- [ ]

**ASSOCIATE DEAN OF HEALTH SCIENCES**

Student should meet to discuss the issue as soon as notified. If not resolved student must file appeal within 48 hours of notification from program faculty.

**CLINICAL APPEALS COMMITTEE**

Will convene a hearing and respond to the student within 72 hours. Student may then appeal the Academic Dean within 24 hours. If the Appeals Board cannot meet the appeals process will begin with the Academic Dean.

**ACADEMIC DEAN**

Dean will respond to student within 48 hours. If not resolved, student may appeal to CEO within 24 hours.

**COLLEGE CEO**

CEO will respond to student within 24 hours. Decision of the CEO is final.

The major difference between the two appeal committees is the membership. The Academic Appeals Committee is composed of faculty & administrators from the college divisional units. The clinical appeals committee is composed of faculty members from within the Division of Allied Health, Nursing, and Physical Education. These faculty members have the expertise to understand the health care setting and patient safety issues.

Students should file appeals and complaints with the Dean of Learning and Student Development. In accordance with college policy, an appeal filed by an allied health student should be heard within 48 hours.
The complete Allied Health and Nursing Clinical Appeal and Violation of Accreditation policy and required forms are on file in the offices of the Associate Dean of Health Sciences, Program Director, and Clinical Coordinator.

d. The Joint Review Committee on Education in Radiologic Technology (JRCERT) accredits the Radiologic Technology Program. The JRCERT web site is www.jrcert.org. The requirements for an accredited radiology program are published in a document called The Standards. The Standards are posted on the bulletin board in the radiology lab. Any student that believes the program is in non-compliance with The Standards or is having their education adversely affected by a violation of The Standards may file an appeal with the Clinical Appeals Committee after meetings with the Program Director and Associate Dean of Health Sciences do not resolve the issue.

In the event that the appeal is not resolved to the student’s satisfaction the student may contact the JRCERT at:

20 N. Wacker Drive
Suite 2850
Chicago, IL. 60606-2961
(312) 704-5300
www.jrcert.org

e. Information discussed by students with faculty may not be confidential, especially if that information concerns the Radiologic Technology Program or the student’s progress in the program. Instructors are required to discuss student related issues with the Program Director. In the event that a student complains about a faculty member to another instructor, that instructor will inform the Program Director of the student’s complaint/concern. The Program Director, to resolve the matter, will schedule a conference with the student and the instructor to whom the complaint is directed.

28. STUDENT RESPONSIBILITY/RECORDING LECTURES

It is the student's responsibility to actively participate in the program. The student is responsible for missed assignments, course registration, course transfer, and other issues. Read all publications thoroughly for notices or policy changes. It is the discretion of the faculty to allow the use of tape recorders in the classroom. Students are to ask the individual instructors of they have permission to tape the lectures. Tape recorders ARE NOT allowed when faculty is reviewing exams. Tape recorders are to be USED FOR EDUCATIONAL PURPOSES AND ONLY DURING THE PRESENTATION OF COURSE CONTENT. The tape recorder is to be used for studying purposes. The use of a tape recorder for any other means requires the express permission of the instructor and/or students involved. RADIOLOGIC TECHNOLOGY PROGRAM FACULTY DO NOT GIVE PERMISSION TO USE RECORDED MATERIAL FOR ANY MEANS OTHER THAN STUDYING. PERMISSION IS TO BE OBTAINED TO USE THE RECORDINGS FOR OTHER THAN STUDYING PURPOSES. This includes giving the tapes to other students.
29.   THE AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGISTS

a. The A.R.R.T. is your professional organization that administers the Registry Examination. *Section II-A; General qualifications* for certification states: "The Rules of Ethics are intended to promote the protection, safety, and comfort of patients. Registered Technologists and applicants engaging in any of the conduct or activities noted in the Rules of Ethics, or who permit the occurrence of said conduct or activities with respect to them, have violated the Rules of Ethics and are subject to sanctions as described. One issue addressed by the Rules of Ethics is the **conviction of a crime**, including a felony, dishonorable discharge from the military, a gross misdemeanor or a misdemeanor, or a misdemeanor with the sole exception of speeding and parking violations. All alcohol and/or drug related violations must be reported, including the charge of driving while intoxicated. (DWI). Conviction as used in this provision includes a criminal proceeding where a finding of guilt is made…. pleaded or an entry of nolo contendere. All violations require ARRT investigation.

Students should clarify their status prior to sitting for the exam. If you have any question concerning previous convictions the ARRT should be contacted at (651) 6870048. The ARRT web site is [www.arrt.org](http://www.arrt.org). The pre-application for a request to qualify a candidate with a criminal record may be downloaded from the site. This can be done confidentially.

The A.R.R.T. will preview records prior to application for examination. There is a fee.

b. The ARRT requires applicants to disclose any sanctions by or dismissals from a program due to a violation of academic honor codes.

c. Qualifications to sit for the ARRT exam are; Successful completion of all program and course requirements, successful completion of all didactic and clinical competencies and completion of all degree requirements.

d. The Registry eligible student is responsible for accurately completing the A.R.R.T. exam application. The *A.R.R.T Examination Handbook* is online. The applicant is responsible for reading the Handbook and adhering to all requirements, including loss of fees for not properly scheduling/rescheduling an examination. NVCC and program faculty are not responsible for issues the student experiences for not following A. R.R.T. requirements.

30.   A.R.R.T. CODE OF ETHICS / WORK EXPERIENCES/PERSONAL BEHAVIOR

a. Students will be expected to adhere to and practice the Code of Ethics as adopted by the A.R.R.T. The Code will be presented in RAD 112. Failure to adhere to the Code of Ethics will result in dismissal from the program. The Code of Ethics may be found in your texts. It will be reviewed in RAD 112. [www.arrt.org](http://www.arrt.org)
b. The A.R.R.T. has informed the radiology community that individuals found to be working as a radiographer without a state license (if applicable) is in violation of the Rules of Ethics (B 16). Connecticut requires a license to expose patients to ionizing radiation. Students employed as technical assistants, according to state statute, cannot legally expose a patient to radiation. Based on the A.R.R.T. ruling, a student employed and working as a technical assistant that is exposing patients to radiation has violated the A.R.R.T. Code of Ethics, which can and will result in that individual no longer being eligible to become a registered technologist. If employed as a technical assistant do not expose patients. It is the credentialed radiographer’s responsibility only.

When attending experiences as a student, you may expose patients to radiation. When employed and working you may not since your classification/title changes. Work experiences are separate from program experiences. Students cannot use work experiences towards any part of the educational program. Students employed as technologist aides are not to wear their student dosimeter badges during employment.

c. There is an expectation that the radiology students will consistently demonstrate professionalism, appropriate conduct and language at all times. Courts have upheld disciplinary action by schools/colleges against students for behavior that occurred outside school activities. Wearing the program uniform identifies your major. Please maintain professional and appropriate behavior at all times. Students often forget when they are in public (i.e., college hallways, stores, cafeterias, computer labs) that others hear their conversations.

d. Personal web pages should be appropriate. Posting of your clinical experiences in social media is not appropriate. Students need to be aware that many perspective employers will search web sites before offering employment. Posting of clinical experience is not appropriate and could be a breach of confidentiality.


The American Society of Radiologic Technologists (A.S.R.T.) and the Connecticut Society of Radiologic Technologists (C.S.R.T.) are your professional organizations. Students are encouraged to join and participate in the activities of the organizations. The ASRT web site is [www.asrt.org](http://www.asrt.org) and [http://www.csrt.us/](http://www.csrt.us/)

32. **CONNECTICUT STATE LICENSE**

Connecticut requires licensure of radiographers. It is the graduate’s responsibility to obtain, complete and submit the license application. License application forms may be downloaded from the State of Connecticut web site at [www.state.ct.us](http://www.state.ct.us). Once in the site go to the Department of Health. [http://www.ct.gov/dph](http://www.ct.gov/dph)
33. **EXTRA CURRICULAR ACTIVITIES**

Social and recreational activities play an important part in your life as a student. The student is encouraged to participate in the events sponsored by and for the students.

34. **PROFESSIONAL CONFERENCES, LECTURES, AND SCIENTIFIC ARTICLES**

Conferences, lectures, and professional articles are available for imaging professionals to remain current with trends and new, innovative imaging techniques. As an imaging professional you will be required to remain current in the imaging sciences. Taking time off from clinical to attend a conference must be done in consultation with the Program Director or Clinical Coordinator.

Students are encouraged to attend lectures and conferences and read articles pertinent to their career in Radiologic Technology.

35. **READMISSION**

Students that leave in good standing may apply for readmission into the program. The faculty cannot guarantee that all students will be readmitted. Readmission requests will be determined by faculty vote. The faculty will review and consider the reason for withdrawal.

Students are to request in writing readmission into the program. For readmission into the fall semester, requests should be submitted by March 15. Readmission in the spring semester requires the student to submit their written request by November 1. Students withdrawn for medical reasons may be required to submit physician reports clarifying their health status.

Students that have withdrawn due to personal, medical, or academic issues in course work other than clinical will be considered good standing and may apply for readmission. A student withdrawn for unsafe clinical or academic dishonesty will not be allowed readmission (see program Section 8 Program Severance). A student that has demonstrated poor clinical progress, and initiates a student withdrawal prior to the last date of student-initiated withdrawal as stated on the college calendar each semester, will be considered for readmission.

Students are allowed readmission into the program only once. A student that is readmitted and unsuccessful will not be given another opportunity for readmission.

36. **STUDENT RECORDS**

Student records and grades are confidential. Each faculty member may have a file on each student. Faculty and the student may view the file. Any viewing by any other individual
requires the written release of the student. The student may request to view their file at any time. Any communication, either written or verbal, requesting information about the student's academic progress, will not be done without the consent of the student. Faculty may keep daily journals to document incidents, staff complaints, staff compliments, or progress of the students. The journals are property of the faculty and may not be viewed by students.

37. **EXAMS & QUIZZES**

Exams and quizzes are property of the faculty. It is the individual choice of each faculty member to allow students to keep the test. Students should check with the faculty member before keeping exam or downloading a test off the Blackboard system. Unauthorized possession of an exam may result in withdrawal of the student. Faculty will make every attempt to return the exam/quiz to students promptly. Faculty will review each exam/quiz administered. Exams that students are not allowed to keep will be kept on file in the faculty office so that the student may review them at any time.

During the review of an exam, students are not permitted to write down questions. Writing exam questions is a breach of the Academic Integrity Policy, and it is grounds for withdrawal from the program.

Students may not have cell phones on the tables during the review of the exam and all recorders are to be turned off.

38. **LIBRARY FACILITIES**

The library facilities at the hospitals have been generously offered to the students of the R.T. program at NVCC. Librarians are on duty to assist students. The students from NVCC are subject to stated rules of each agency.

The NVCC library subscribes to several radiology periodicals. Students are encouraged to use all library facilities for research and to enhance learning. The library web site also provides electronic resources to assist students in their academic work.

39. **PARKING FACILITIES**

Information regarding parking privileges will be discussed during orientation class. Please adhere to the parking rules of the college and clinical affiliates. Continued parking violations can result in the revoking of parking privileges. Violations at the college will result in a ticket. Some of the affiliates will tow cars.
40. ESSENTIAL REQUIREMENTS

The following requirements **MUST** be met for the student to satisfactorily complete the Radiologic Technology Program.

a. Maintain a "C" average in theory, practice, and science course work. Complete successfully the general education core courses in the curriculum.

b. Satisfactorily complete all required clinical competencies as outlined in *The Handbook*. Satisfactory completion of the competencies means ALL competencies are successfully completed with an 80 and within 3 attempts.

c. Participate in all clinical rotations as assigned.

d. Perform the skills required of a radiographer.

e. Maintain clinical record log that is current.

f. Comply with the A.R.R.T. Code of Ethics, college and program policies.

g. Present a presentation/paper in RAD 215.

h. Successfully complete all courses identified in the program's curriculum.

i. Return dosimeter badges and hospital I.D.'s.

j. Successful completion of written exit competencies. Successful completion means ALL written exit exams are passed with a grade of 75 or higher. Unsuccessful completion of competencies will result in the student no longer being Registry eligible.

4. TIPS FOR SUCCESS

The following are tips offered to the students for success in the radiology program:

a. Read the texts prior to class & clinical. Use the On-line modules when available. Use the electronic textbooks to make notes. Students are aware of their clinical assignment for the entire semester. Report to clinical prepared for that assignment by reading the clinical texts.

b. Use the lab and the RRS to practice whenever you can.

c. Use the computer lab and the other recommended software.

d. Ask the faculty for tutoring.

e. Use the library and Internet. They are a wealth of resources.
f. Attend all classes and clinical as scheduled. You will be surprised at how much one misses by missing a class or clinical assignment.

g. Ask questions for clarification. Research issues. Do extra studying.

h. Use two notebooks: one to take notes during lectures, another one to recopy the notes to make them neater.

i. Do a clinical competency whenever it is available and you are prepared. Do not wait to the end of the semester to perform the competencies.

j. Take one day at a time.

k. Do not wait to the last minute to submit papers, study, read texts, and complete assignments. This will cause stress.

l. The class should work as a team instead of individuals. Help and respect each other.

Use all available resources at Naugatuck Valley Community College for help and guidance. NVCC offers the student an opportunity for success, but cannot guarantee it unless the student actively enters into the learning process.

I have read the student handbook and a college representative(s) has explained it. I understand it completely and will abide by the handbook. I understand that there are hazards with working with ionizing radiation and the faculty strongly encourages me to report the possibility that I may be pregnant. I will not hold the affiliates or college responsible for any complications that result from working with ionizing radiation as the hazards and complications have been explained.

Any information learned during the clinical experience at any affiliate I am assigned, must be held in the strictest of confidence. This includes any patient information including personal, medical identifiable information, diagnosis, prognosis, reason for admission or treatment and any patient I observe in a clinical, even if they are known to me, during my clinical experiences. I cannot post such information on any social media outlets. Violation of the confidentiality can result in the immediate withdrawal from the program.

Any business practices at the clinical affiliate I am assigned may not be discussed.

Print Name _________________________________________

Student's Signature ___________________________________ Date __________________
CURRICULUM

The program's curriculum is listed below. All courses must be taken in sequence. The curriculum is designed as a progression of increasing complexity. A grade of "C" must be maintained in all radiology and science courses.

Radiologic Technology Program Curriculum

<table>
<thead>
<tr>
<th>COURSE NUMBER</th>
<th>COURSE TITLE/COMPETENCY AREA</th>
<th>CREDITS</th>
<th>PREREQUISITES FOR COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester Radiologic Technology (Fall)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG*H101</td>
<td>Composition (Critical Analysis &amp; Logical Thinking)</td>
<td>3</td>
<td>Eligibility for ENG*H101 - Composition</td>
</tr>
<tr>
<td>BIO*H211</td>
<td>Anatomy &amp; Physiology I (Scientific Knowledge)</td>
<td>4</td>
<td>BIO*H105, H115 or 121 or equivalent</td>
</tr>
<tr>
<td>RAD*H112</td>
<td>Orientation to Radiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RAD*H197</td>
<td>Clinical Practice I</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Second Semester Radiologic Technology (Spring)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO*H212</td>
<td>Anatomy &amp; Physiology II</td>
<td>4</td>
<td>BIO*H211 - Anatomy &amp; Physiology I</td>
</tr>
<tr>
<td>PHY*H110</td>
<td>Introduction to Physics (Scientific Reasoning)</td>
<td>4</td>
<td>MAT*H095 or equivalent</td>
</tr>
<tr>
<td>PSY*H111</td>
<td>General Psychology I (Social Phenomena)</td>
<td>3</td>
<td>Eligibility for ENG*H101 - Composition</td>
</tr>
<tr>
<td>RAD*H113</td>
<td>Rad. Physics/Radiographic Quality I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RAD*H198</td>
<td>Clinical Practice II</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>RAD*H198L</td>
<td>Procedures Lab I</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Third Semester Radiologic Technology (Summer)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAD*H114</td>
<td>Contrast Media Procedures/Radiographic Quality II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RAD*H199</td>
<td>Clinical Practice III</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Fourth Semester Radiologic Technology (Fall)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM*H100</td>
<td>Introduction to Communication (Oral Communications)</td>
<td>3</td>
<td>Eligibility for ENG*H101, Composition</td>
</tr>
<tr>
<td>PSY*H201</td>
<td>Lifespan Development</td>
<td>3</td>
<td>PSY*H111 - General Psychology</td>
</tr>
<tr>
<td>RAD*H200</td>
<td>Rad. Physics/Diagnostic Imaging Modalities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RAD*H272</td>
<td>Radiobiology and Protection</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RAD*H297</td>
<td>Clinical Practice IV</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RAD*H297L</td>
<td>Procedures Lab I</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fifth Semester Radiologic Technology (Spring)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG*H102</td>
<td>Literature &amp; Composition (Written Communications)</td>
<td>3</td>
<td>ENG*H101 - Composition</td>
</tr>
<tr>
<td>CSA*H105</td>
<td>Introduction to Software Applications (Continuing Learning &amp; Information Literacy/Ethics)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Historical Knowledge &amp; Understanding Elective</td>
<td>Choose any. See college catalog for course options.</td>
<td>3</td>
<td>Eligibility for ENG*H101 - Composition</td>
</tr>
<tr>
<td>RAD*H215</td>
<td>Radiographic Pathology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RAD*H258</td>
<td>Clinical Practice V</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td>65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

† Must be taken within 5 years of starting the program in the Fall semester.

†† CSA*H101 Introduction to Computers is an acceptable substitute for CSA*H105.

††† Pending curriculum change approval.
**CLINICAL AFFILIATES/FACULTY**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Address</th>
<th>Phone</th>
<th>Instructor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol Hospital</td>
<td>Brewster Road, Bristol, CT 06011</td>
<td>(860) 585-3000</td>
<td>Tiffani McWilliams R.T. (R)</td>
</tr>
<tr>
<td>Charlotte Hungerford Hospital</td>
<td>540 Litchfield Street, Torrington, CT 06790</td>
<td>(860) 496-6666</td>
<td>Trish Woodman, R.T. (R)</td>
</tr>
<tr>
<td>Danbury Hospital/NuVance Health</td>
<td>24 Hospital Avenue, Danbury, CT 06810</td>
<td>(203) 739-7000</td>
<td>Michael Joseph, R.T. (R)</td>
</tr>
<tr>
<td>New Milford Hospital/NuVance Health</td>
<td>21 Elm Street, New Milford, CT 06776</td>
<td>(860) 210-5000</td>
<td>Scott Dandeneau R.T. (R)</td>
</tr>
<tr>
<td>St. Mary's Hospital</td>
<td>56 Franklin St., Waterbury, CT 06706</td>
<td>(203) 709-6020</td>
<td>Tony Santos, MHA, R.T. (R), (CT), (MR), Ann Vieira, R.T. (R), (CT), Donna Thompson, R.T. (R)</td>
</tr>
<tr>
<td>Waterbury Hospital Health Center</td>
<td>64 Robbins St., Waterbury, CT 06721</td>
<td>(203) 573-7124</td>
<td>Jim Pronovost, M.S., R.T. (R), Carolina Craciun R.T. (R), Jessica LaMere R.T. (R)</td>
</tr>
<tr>
<td>Diagnostic Imaging of Southbury</td>
<td>385 Main Street South, Union Square, Bldg. #2, Southbury, CT 06488</td>
<td>(203) 267-5800</td>
<td>Chris Beaulieu NM, R.T. (R)</td>
</tr>
<tr>
<td>Diagnostic Imaging Associates</td>
<td>(Naugatuck Valley Radiological Associates) 1579 West Main Street, Waterbury, CT 06708</td>
<td>(203) 574-1311</td>
<td>Dayna Dillon R.T. (R)</td>
</tr>
<tr>
<td>Orthopedics of New England, PC</td>
<td>1579 Straits Turnpike, Middlebury, CT 06762</td>
<td>(203) 598-0700</td>
<td>Donna Foti, R.T. (R)</td>
</tr>
<tr>
<td>Greater Waterbury Imaging Center*</td>
<td>64 Robbins Street, Waterbury, CT 06721</td>
<td>(203) 573-7674</td>
<td>Susan Castelli, R.T. (R), (MR)</td>
</tr>
<tr>
<td>Ortho Connecticut of Danbury</td>
<td>2 Riverview Drive, Danbury, CT 06810</td>
<td>(203) 702-6605</td>
<td>Je’nae Pelletier R.T. (R)</td>
</tr>
</tbody>
</table>

*Located on campuses of hospital (next to the ED) and considered part of the experiences at Waterbury Hospital in the second year.*
NAUGATUCK VALLEY COMMUNITY COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM
Required Clinical Competencies

The following minimum clinical competencies are recommended each semester. This number is only a minimum suggestion for students in order to successfully complete the program. There will be semesters in which more than the minimum must be done. Do not stop performing competencies because you have completed the minimum.

**Note:** ***Class of 2022 will need 52 comps/ Class of 2023 will need 51 comps, this is in addition to the general patient care requirements. For specific required mandatory vs. elective competency requirements, see the appropriate ARRT clinical competency requirements. Make sure you look at the year according to when you are scheduled to graduate) These documents are listed here in this handbook (See index).***

**Clinical Internships:**

RAD 197 - 7
RAD 198 - 12
RAD 199 - 7
RAD 297 - 12
RAD 298 - Remaining competencies
Radiography

1. Introduction

Candidates for certification and registration are required to meet the Professional Education Requirements specified in the ARRT Rules and Regulations. ARRT's Radiography Didactic and Clinical Competency Requirements are one component of the Professional Education Requirements.

The requirements are periodically updated based upon a practice analysis which is a systematic process to delineate the job responsibilities typically required of radiographers. The result of this process is a task inventory which is used to develop the clinical competency requirements (see section 4 below) and the content specifications which serve as the foundation for the didactic competency requirements (see section 3 below) and the examination.

2. Documentation of Compliance

To document that the Didactic and Clinical Competency Requirements have been satisfied by a candidate, the program director (and authorized faculty member if required) must sign the ENDORSEMENT SECTION of the Application for Certification and Registration included in the Certification and Registration Handbook.

Candidates who complete their educational program during 2017 or 2018 may use either the 2012 Didactic and Clinical Competency Requirements or the 2017 requirements. Candidates who complete their educational program after December 31, 2018 must use the 2017 requirements.

3. Didactic Competency Requirements

The purpose of the didactic competency requirements is to verify that individuals had the opportunity to develop fundamental knowledge, integrate theory into practice and hone effective and critical thinking skills required to demonstrate professional competency. Candidates must successfully complete coursework addressing the topics listed in the ARRT Content Specifications for the Radiography Examination. These topics would typically be covered in a nationally-recognized curriculum such as the ASRT Radiography Curriculum. Educational programs accredited by a mechanism acceptable to ARRT generally offer education and experience beyond the minimum requirements specified here.

4. Clinical Competency Requirements

The purpose of the clinical competency requirements is to verify that individuals certified and registered by the ARRT have demonstrated competency performing the clinical activities fundamental to a particular discipline. Competent performance of these fundamental activities, in conjunction with mastery of the cognitive knowledge and skills covered by the radiography examination, provides the basis for the acquisition of the full range of procedures typically required in a variety of settings. Demonstration of clinical competence means that the candidate has performed the procedure independently, consistently, and effectively during the course of his or her formal education. The following pages identify the specific procedures for the clinical competency requirements. Candidates may wish to use these pages, or their equivalent, to record completion of the requirements. The pages do NOT need to be sent to the ARRT.
4.1 General Performance Considerations

4.1.1 Patient Diversity

Demonstration of competence should include variations in patient characteristics such as age, gender, and medical condition.

4.1.2 Simulated Performance

The ARRT requirements specify that certain clinical procedures may be simulated as designated in the specific requirements below. Simulations must meet the following criteria:

- The candidate must simulate the procedure on another person with the same level of cognitive, psychomotor, and affective skills required for performing the procedure on a patient. Examples of acceptable simulation include positioning another person for a projection without actually activating the x-ray beam and performing venipuncture by demonstrating aseptic technique on another person, but then inserting the needle into an artificial forearm or suitable device;
- The program director must be confident that the skills required to competently perform the simulated procedure will transfer to the clinical setting, and, if applicable, the candidate must evaluate related images.

4.1.3 Elements of Competence

Demonstration of clinical competence requires that the program director or the program director’s designee has observed the candidate performing the procedure independently, consistently, and effectively during the course of the candidate’s formal educational program.

4.2 Radiography-Specific Requirements

As part of the educational program, candidates must demonstrate competence in the clinical activities identified below:

- Ten mandatory general patient care activities;
- 37 mandatory imaging procedures;
- 15 elective imaging procedures selected from a list of 34 procedures;
- One of the 15 elective imaging procedures must be selected from the head section; and
- Two of the 15 elective imaging procedures must be selected from the fluoroscopy studies section, one of which must be either upper GI or contrast enema.

These clinical activities are listed in more detail in the following sections.
4.2.1 General Patient Care

Candidates must be CPR certified and demonstrate competence in the remaining nine patient care activities listed below. The activities should be performed on patients whenever possible, but simulation is acceptable.

<table>
<thead>
<tr>
<th>General Patient Care Procedures</th>
<th>Date Completed</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPR Certified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vital Signs – Blood Pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vital Signs – Temperature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vital Signs – Pulse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vital Signs – Respiration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vital Signs – Pulse Oximetry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterile and Medical Aseptic Technique</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venipuncture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer of Patient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care of Patient Medical Equipment (e.g., Oxygen Tank, IV Tubing)</td>
<td></td>
<td></td>
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</tbody>
</table>

4.2.2 Imaging Procedures

Candidates must demonstrate competence in all 37 procedures identified as mandatory. Procedures should be performed on patients whenever possible. A maximum of eight mandatory procedures may be simulated if demonstration on patients is not feasible.

Candidates must demonstrate competence in 15 of the 34 elective procedures. Candidates must select at least one of the 15 elective procedures from the head section. Candidates must select either upper GI or contrast enema plus one other elective from the fluoroscopy section as part of the 15 electives. Elective procedures should be performed on patients whenever possible. If demonstration on patients is not feasible, electives may be simulated.

Institutional protocol will determine the positions and projections used for each procedure.

Demonstration of competence must include:
- patient identity verification
- examination order verification
- patient assessment
- room preparation
- patient management
- equipment operation
- technique selection
- patient positioning
- radiation safety
- imaging processing
- image evaluation
### 4.2.2 Imaging Procedures (continued)

<table>
<thead>
<tr>
<th>Radiographic Imaging Procedures</th>
<th>Mandatory or Elective</th>
<th>Date Completed</th>
<th>Patient or Simulated</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chest and Thorax</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Chest Routine</td>
<td>✓</td>
<td></td>
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</tr>
<tr>
<td>Chest AP (Wheelchair or Stretcher)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ribs</td>
<td>✓</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Chest Lateral Decubitus</strong></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sternum</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Airway (Soft-Tissue Neck)</td>
<td>✓</td>
<td></td>
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</tr>
<tr>
<td><strong>Upper Extremity</strong></td>
<td></td>
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</tr>
<tr>
<td>Thumb or Finger</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Wrist</td>
<td>✓</td>
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<td></td>
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<tr>
<td>Forearm</td>
<td>✓</td>
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<tr>
<td>Elbow</td>
<td>✓</td>
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<tr>
<td>Humerus</td>
<td>✓</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Shoulder</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trauma: Shoulder or Humerus (Scapular Y, Thoracic or Axial)</strong></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clavicle</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scapula</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Joints</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trauma: Upper Extremity (Non Shoulder)</strong></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lower Extremity</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Toes</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foot</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Ankle</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knee</td>
<td>✓</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Tibia-Fibula</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Femur</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trauma: Lower Extremity</strong></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patella</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcaneus</td>
<td>✓</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* Trauma is considered a serious injury or shock to the body and requires modifications in positioning and monitoring of the patient's condition.
### 4.2.2 Imaging Procedures (continued)

<table>
<thead>
<tr>
<th>Radiographic Imaging Procedures</th>
<th>Mandatory or Elective</th>
<th>Date Completed</th>
<th>Patient or Simulated</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head – Candidates must select at least one elective procedure from this section.</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Skull</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paranasal Sinuses</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facial Bones</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orbits</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zygomatic Arches</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasal Bones</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mandible</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporomandibular Joints</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spine and Pelvis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cervical Spine</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoracic Spine</td>
<td>✓</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Lumbar Spine</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Cross-Table (Horizontal Beam)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Lateral Spine (Patient Recumbent)</td>
<td>✓</td>
<td></td>
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<tr>
<td>Pelvis</td>
<td>✓</td>
<td></td>
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<tr>
<td>Hip</td>
<td>✓</td>
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<td></td>
</tr>
<tr>
<td>Cross-Table (Horizontal Beam)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Lateral Hip (Patient Recumbent)</td>
<td>✓</td>
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<td></td>
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<tr>
<td>Sacrum and/or Coccyx</td>
<td>✓</td>
<td></td>
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<td></td>
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<tr>
<td>Scoliosis Series</td>
<td>✓</td>
<td></td>
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<td></td>
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<tr>
<td>Sacroiliac Joints</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdomen</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdomen Supine (KUB)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdomen Upright</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdomen Decubitus</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intravenous Urography</td>
<td>✓</td>
<td></td>
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</tbody>
</table>
4.2.2 Imaging Procedures (continued)

<table>
<thead>
<tr>
<th>Imaging Procedures</th>
<th>Mandatory or Elective</th>
<th>Mandatory</th>
<th>Elective</th>
<th>Date Completed</th>
<th>Patient or Simulated</th>
<th>Competence Verified By</th>
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</thead>
<tbody>
<tr>
<td>Fluoroscopy Studies – Candidates must select either upper GI or contrast enema plus one other elective procedure from this section.</td>
<td></td>
<td></td>
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<tr>
<td>Upper GI Series, Single or Double Contrast</td>
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<td>✓</td>
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<tr>
<td>Contrast Enema, Single or Double Contrast</td>
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<td>✓</td>
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<tr>
<td>Small Bowel Series</td>
<td>✓</td>
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<td></td>
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<tr>
<td>Esophagus (NOT Swallowing Dysfunction Study)</td>
<td>✓</td>
<td></td>
<td></td>
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<tr>
<td>Cystography/Cystourethrocgraphy</td>
<td>✓</td>
<td></td>
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<tr>
<td>ERCP</td>
<td>✓</td>
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</tr>
<tr>
<td>Myelography</td>
<td>✓</td>
<td></td>
<td></td>
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<tr>
<td>Arthrography</td>
<td>✓</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Hysterosalpingography</td>
<td>✓</td>
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</tr>
<tr>
<td>Mobile C-Arm Studies</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>C-Arm Procedure (Requiring Manipulation to Obtain More Than One Projection)</td>
<td>✓</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Surgical C-Arm Procedure (Requiring Manipulation Around a Sterile Field)</td>
<td>✓</td>
<td></td>
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<tr>
<td>Mobile Radiographic Studies</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chest</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdomen</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Orthopedic</td>
<td>✓</td>
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<tr>
<td>Pediatric Patient (Age 6 or Younger)</td>
<td></td>
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</tr>
<tr>
<td>Chest Routine</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Extremity</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Extremity</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdomen</td>
<td>✓</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile Study</td>
<td>✓</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Geriatric Patient (At Least 65 Years Old and Physically or Cognitively Impaired as a Result of Aging)</td>
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<tr>
<td>Chest Routine</td>
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</tr>
<tr>
<td>Upper Extremity</td>
<td>✓</td>
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<td></td>
</tr>
<tr>
<td>Lower Extremity</td>
<td>✓</td>
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</table>
NAUGATUCK VALLEY COMMUNITY COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM

EVALUATION OF THE CLINICAL EDUCATION

Sample evaluation forms used in the Radiologic Technology Program follow on the next pages. They include: Clinical Competency, Professional Behavioral & Clinical Skill Evaluation, and Affiliate Evaluation.

The purpose of providing a clinical education is to integrate the knowledge from theory with a "hands on" clinical experience. This enables faculty to observe students performing the various radiographic procedures and evaluate the skills required, achieving the goal of becoming a competent radiographer.

This is accomplished by rotating the student through various clinical assignments in the radiology department; with a correlation of classroom and practical experiences. During the semester, the student's ability to perform will be evaluated. The evaluation to be used is known as a clinical competency, and is used to evaluate the student's skill development in performing specific radiographic examinations.

It is not the only means of evaluating the student, but it does contribute to a considerable portion of the student's grade. In total, there are three ways the faculty will evaluate the performance of the student.

Test and Quizzes

Tests and quizzes will be administered throughout the semester at the discretion of the clinical instructors. They are used to test your cognitive domain (thinking, knowledge) and carry a 33% weight in calculating your clinical grade.

Clinical Competencies

A competency is designed to evaluate your psychomotor skills. That is, can you transfer your knowledge of performing a radiographic exam to actual practice? The required competencies are listed in the handbook beginning on page 36. A student must satisfactorily complete, on the first attempt, at least one of the semester's clinical competencies. If at least one competency is not successfully completed on the first attempt, the student is considered unsafe and is withdrawn from the program. Clinical Competencies carry a 33% weight in calculating your final grade.

The competency form used for mandatory, elective, and a simulated procedure begins on page 45 of The Handbook. The instrument’s grade key is also presented. Only recognized faculty perform competency evaluations.
Students are required to achieve an 80 or better to satisfactorily complete a competency. The student will be given a second opportunity to perform the competency if he/she fails the first attempt. If after the second attempt, the student fails the competency, a third attempt may be allowed. To be granted a third attempt, the following will occur:

1. The Clinical Instructor and Program Director will confer regarding the student's clinical progress. After carefully reviewing the student's progress the faculty may allow the attempt or withdraw the student for unsatisfactory clinical progress.

2. The student is to seek immediate remediation from the RRS.

3. The student will complete a written document on the procedure. The clinical instructor will provide the student with a document that outlines the required research the student is to complete. The clinical instructor will schedule the date the document is to be submitted. Upon successful submission of the document the clinical instructor will determine if a 3rd attempt at the procedure will be allowed.

4. If the instructor agrees to allow a 3rd attempt, the student will verbally outline step by step to the clinical instructors how the procedure is to be performed. The Clinical Instructor and Program Director may confer before deciding to allow the third attempt.

5. If the student should fail after a third attempt, the student is withdrawn for having unsatisfactory clinical progress.

6. The first grade the student receives in performing their competency is the one used to calculate their G.P.A.

Once a student has demonstrated competency in a particular procedure, the student may then perform that procedure alone provided a technologist is in the immediate vicinity. The students should monitor/maintain their completed competencies. It is recommended that students complete a list of remaining competencies and provide that list to their instructor each semester. However, this does not mean you will not be tested on that procedure again. If at any time a Clinical Instructor chooses, they may challenge you on any procedure regardless if you have already performed that exam. This challenge is in addition to the required competencies for that semester. The grade of the challenged competency will be computed in with the other competency grades. Students failing a challenged competency will only be given one additional opportunity to make up the exam. Failing the challenged competency, a second time will result in your withdrawal from the program for having unsatisfactory clinical progress. The challenged competency is not intended to be used on a regular basis, but rather is used when the student, despite the fact they have passed a competency, may continue to demonstrate poor positioning skills in that area. If a student recognizes that they are lacking in one area or skill, remedial help is available and the student should not hesitate to meet with faculty.
AN UNSUCCESSFUL FIRST ATTEMPT OF EVERY CLINICAL COMPETENCY PERFORMED IN A SEMESTER WILL RESULT IN WITHDRAWAL OF THE STUDENT. A grade of F will be given.

Professional Behavioral & Clinical Skill Evaluation

This tool is designed to evaluate the behaviors and skills that the student demonstrates throughout the clinical experience. The instrument is divided into two parts; Behavior and Skill. The Behavior section is used to evaluate the affective domain. (Attitude, professional ethics, conduct, behavior and values). The skill section evaluates psychomotor skills that may or may not have been assessed during a clinical competency. It will be a summary of the skills demonstrated throughout the semester.

The evaluation of the student’s Behavior & Skill will be done twice a semester. This provides the student with an opportunity to improve. Prior to meeting with the clinical instructor, students will be required to perform a self-evaluation using the program’s generic abilities document. On the self-evaluation, students will be required to establish goals for self-improvement during the semester.

Affiliate faculty will be evaluating your clinical performance. The evaluation by affiliate faculty will be averaged as part of the quiz grade.

CLINICAL GRADING

| Competencies | 33% |
| Professional Behavioral & Clinical Skill Evaluation | 33% |
| Tests, quizzes, affiliate evaluations | 33% |
| **Total** | **100%** |

**EXAMPLE:**

Competency Average = 91.3 x 33% = 30.1
Behavior & Skill Evaluation = 76 x 33% = 25.0
Tests, Quizzes = 88 x 33% = 29.0

**FINAL AVERAGE** = 84.1 = B

The faculty of the Radiology Program is committed to providing the student with a quality clinical education. It is the intent of the faculty that by providing the student with a quality education the student will demonstrate the competence and professionalism needed to become a member of the patient care team.
GENERAL EVALUATION

1. Evaluation of requisition:

   Student was able to:

   a. identify the procedure to be performed.

   b. identify the patient's age and name.

   c. pronounce the patient's name.

   d. compare the patient's I.D. bracelet with the x-ray requisition (checks address, date of birth if outpatient).*

   e. explain the clinical history and input history into PAC system*

2. Facilities readiness:

   Student was able to:

   a. provide a clean table.

   b. have an adequate receptor supply.

   c. have emesis basins and emergency medications available.

   d. locate syringes and needles as necessary.

   e. turn machine "on" and prepare for exposure

   f. turn tube in position necessary for exam.

   g. locate code cart
3. Patient care and safety:

   Student was able to:

   a. assist patient to radiographic room.
   b. assist patient to radiographic table.
   c. keep patient clothed and/or draped for modesty.
   d. talk with patient in a concerned, professional manner.
   e. have patient attired properly.
   f. follow proper isolation when appropriate.
   g. perform proper sterile technique when appropriate.
   h. explain exam to patient.
   i. communicate progress of exam.
   j. demonstrate Standard Precautions.*
   k. complete patient data entry.
   l. recognize and respond to emergency situations.

4. Digital Fluoroscopy

   Student was able to:

   a. identify the proper contrast media for exam*
   b. prepare contrast media for exam
   c. identify contraindications for contrast media used
   d. prepare room for fluoroscopic exam
   e. monitor patient for contrast reaction
f. perform proper radiation safety procedures during fluoroscopic exam

g. send images to Picture Archive Communication System

There is a one-point deduction for each task not performed.
*Critical Task - Grading begins at 80 if the student does not properly identify the patient or establish an appropriate clinical history.

**CRITERIA FOR PERFORMANCE EVALUATION**

**Student Performance**

1. Correct Radiographic Positioning*

   The student was able to:

   a. position patient on table correctly.
   
   b. use upright bucky if appropriate, use DR/CR if appropriate
   
   c. remove unwanted articles and anatomical parts.
   
   d. obliqued if necessary.
   
   e. lateral if necessary.
   
   f. correct phase of respiration.
   
   g. superimposition from other body parts.
   
   h. used proper immobilization.

   **SUBTRACT ONE POINT FOR EACH SKILL NOT PERFORMED PROPERLY UP TO A MAXIMUM OF 3 POINTS**

   * Critical Task - Grading will begin at 80 if the student: radiographs the wrong part, performs the wrong procedure, or performs the wrong routine.

2. Correct central ray location:

   The student was able to:
a. demonstrate proper tube angle...........................................................1 point
b. demonstrate proper central ray entrance/exit..........................................1 point
c. align body part to center of image receptor...................................................1 point

3. Correct selection of technical factors*

The student was able to:

a. measure the patient and interpret the technique ..............................................1 point
b. set machine according to appropriate technical factors...............................1 point* excessive technique or underexposure results in an unsuccessful completion of competency (At the discretion of the instructor and based on technique that should be used).
   -modify exam tag in a cassette-less room
c. adjust technique according to pathology or other circumstances (ex. SID change, grid vs. non-grid) .................................................................1 point

4. Correct equipment selection and use

The student was able to:

a. properly use equipment.................................................................................1 point
   1. grid
   2. turn table from horizontal to vertical.
   3. move bucky tray and utilize locks.
   4. insert receptor in bucky tray properly
   5. proper use of collimator (automatic or manual)
   6. proper use of DR / CR image receptors

b. proper image receptor .................................................................................1 point
   1. correct size and orientation to part

c. use proper SID.............................................................................................1 point
   1. check SID
   2. compensate to reduce magnification/exposure

5. Correct patient markers

The student was able to:

a. use proper markers (including hourly, minute, erect, etc.)
1. marker not used/improper marker used........................................0 points*
2. used proper marker and made adjustment for collimation & position of part.................................................................3 points

*Critical task - Grading will begin at 80 for not using or using the wrong marker

3. Radiation Protection*

The student was able to:

a. question females, within childbearing age, concerning the possibility of pregnancy.
b. document date of last menstrual period.
c. inputs data concerning LMP/pregnancy into PAC system
d. protect and shield patient by proper use of apron, gloves, shadow shields, etc. Shielding of ALL patients is required. Student shielding during mobiles is required.

*Critical task - Grading will begin at 80 for not performing critical tasks.

4. Repeated exposure*

The following key will be used to deduct points for repeated images:

< 4 images = 5 points for each repeat
4 - 6 images = 3 points for each repeat
>6 images = 1 point for each repeat

*Critical task –

a. Grading will be begin at 80 if all images have to be repeated on exams with 3 or less images
b. Grading will begin at 80 if 50% of the images have to be repeated on exams with 4 or more images

It is the discretion of the clinical instructor to establish a time limit to perform each radiographic position. The time limit is set by the instructor and is determined by the complexity of the exam, student's current skill level, pathology, and patient condition. Faculty for exceeding the time limit can deduct points.

Criteria for Image Evaluation

The radiograph(s) demonstrate(s)
1. Anatomical part(s):
   a. part is shown in correct position & without motion..........................2 points
   b. marker appears on image.................................................................3 points

2. Proper alignment
   a. part centered..................................................................................2 points
   b. tube centered (to table and IR)........................................................1 point

3. Post Processing
   a. CR/DR system used properly ..........................................................1 point*
      1. receptor inserted properly CR
      2. receptor prepared for next case CR
      3. receptor DR Crosswise/Lengthwise
         - Correct image format (2,3,4 on one)
         - Properly sent to printer if required

4. Manipulation of patient & image data correct*
   *critical task start at 80 if the student assigns or would have assigned the wrong
   patient to the images taken

5. Sensitivity number (S number) is within range of accepted standards
   - if above or below of accepted standard the image is to be considered as repeated
     - if sensitivity number is at the low or high end of acceptable standards deduct 1 point
       per image when at high end (lower dose) deduct 2 points per points per image at low
       end (higher dose)
     *Critical Task – grading begins at 80 if case is deleted and procedure repeated

6. Image windows are used correctly/image annotated properly..............1 point

7. Image is stored into PAC system and in proper order..............................1 point

4. Radiation Protection
   a. Cone or collimator limits visible (appropriately)
      1. four sides present/student attempted to collimate 4 sides................3 points
2. three sides present.......................................................................................................................... 2 points
3. two sides present/student only collimate one way.......................................................... 1 point
4. one or no sides present/the student did not collimate .................................................. 0 points

**NOTE**: Collimator limits may not always be visible on the CR image. The instructor is required to observe the student collimating during the procedure. Students that collimate (4 sided) but the cone cut is not obvious will not have a point deducted unless the field size could have been reduced more than the student adjusted. This is at the discretion of the instructor. The instructor will consider the size of the anatomical part/image receptor when determining their rating.

b. Evidence of proper patient shielding

1. apron or shields protect appropriate parts in the primary beam -
   if shielding is not visible deduct 2 points

5. Knowledge of Anatomy and Alternate Projections

a. The student identifies anatomy on the radiograph.
b. The student identifies alternate projections

   Each wrong answer .................................................................................................................. 1 point

Questions and format are the discretion of the instructor

---

**NAUGATUCK VALLEY COMMUNITY COLLEGE RADIOLOGIC TECHNOLOGY PROGRAM CRITERIA FOR SIMULATED IMAGE EVALUATION**

Simulated radiograph would demonstrate:

1. Anatomical part

   a. Skills would show part in proper position..................................................................... 1 point
   b. Proper actions taken to prevent unnecessary motion of part...................................... 1 point
   c. Identifies anatomy on teaching radiograph................................................................. 1 point

2. Proper alignment

   a. IR and tube centered ........................................................................................................ 1 point
   b. Part centered ..................................................................................................................... 1 point
c. Patient positioned correctly................................................................. 1 point

3. Radiographic quality

a. Correct mAs......................................................................................... 1 point
b. kVp adequate according to part............................................................. 1 point
c. Compensation of factors correct according to patient's condition......... 1 point

4. Radiation protection

a. Visibility of cone cuts ........................................................................... 2 points
b. Protection devices adequately shield the patient from the primary beam................................................................................. 1 point

rev.
1/18/96 2/15/00
8/9/00, 5/11/04, 6/11/06, 6/6/08, 3/4/09, 02/20/18, 8/20/2020, 08/20/2021, 02/15/2022

Naugatuck Valley Community College
Radiologic Technology Program
Clinical Competency Evaluation Form

<table>
<thead>
<tr>
<th>Student:</th>
<th>Date:</th>
<th>Instructor:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Radiologic Procedure: ___________________________
Requirement Type: ____________________________
Patient Number: ____________________________

Evaluation of Requisition

The student was able to: NO

a. identify the procedure to be performed
b. identify the patient's age and name

53
d. compare the patient's I.D. bracelet with the x-ray requisition (check address/DOB if outpatient)*
e. explain clinical history*

Facilities Readiness
The student was able to: NO

a. provide a clean table
b. have an adequate IR supply
c. have emesis basin and emergency medications available
d. locate syringes and needles as necessary
e. prepare machine for exposures
f. locate the code cart
g. turn tube in positions necessary for exam
h. obtain previous images (when necessary)

Patient Care and Safety
The student was able to: NO

a. assist patient to radiographic room
b. assist patient to radiographic table
c. keep patient clothed and/or draped for modesty
<table>
<thead>
<tr>
<th>Task</th>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>d. talk with patient in a concerned, professional manner. Modifies communication to be age / cultural appropriate</td>
<td>☐</td>
</tr>
<tr>
<td>e. have patient attired properly</td>
<td>☐</td>
</tr>
<tr>
<td>f. follow proper isolation procedure when appropriate</td>
<td>☐</td>
</tr>
<tr>
<td>g. perform proper sterile technique</td>
<td>☐</td>
</tr>
<tr>
<td>h. explain exam to patient</td>
<td>☐</td>
</tr>
<tr>
<td>i. communicate progress of exam to patient</td>
<td>☐</td>
</tr>
<tr>
<td>j. demonstrate standard precautions*</td>
<td>☐</td>
</tr>
<tr>
<td>k. complete x-ray requisition including computer entry when appropriate</td>
<td>☐</td>
</tr>
<tr>
<td>l. recognize and respond to emergency situations</td>
<td>☐</td>
</tr>
</tbody>
</table>

**Digital Fluoroscopy**

The student was able to: NO

<table>
<thead>
<tr>
<th>Task</th>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Identify the proper contrast media for exam*</td>
<td>☐</td>
</tr>
<tr>
<td>b. prepare contrast media correctly for exam</td>
<td>☐</td>
</tr>
<tr>
<td>c. identify contraindications for contrast media chosen</td>
<td>☐</td>
</tr>
<tr>
<td>d. prepare room for fluoroscopic exam</td>
<td>☐</td>
</tr>
<tr>
<td>e. monitor patient for reaction</td>
<td>☐</td>
</tr>
</tbody>
</table>
### Performance Evaluation

<table>
<thead>
<tr>
<th>Positions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Correct radiographic positioning*</td>
</tr>
<tr>
<td>2. Correct central ray location</td>
</tr>
<tr>
<td>3. Correct selection of technical factors</td>
</tr>
<tr>
<td>4. Correct equipment selection and use</td>
</tr>
<tr>
<td>5. Correct markers and identification*</td>
</tr>
<tr>
<td>6. Radiation protection*</td>
</tr>
<tr>
<td>7. Repeated exposure*</td>
</tr>
</tbody>
</table>

### Image Evaluation

<table>
<thead>
<tr>
<th>Positions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Anatomical Part</td>
</tr>
<tr>
<td>2. Proper Alignment</td>
</tr>
<tr>
<td>3. Post Processing</td>
</tr>
<tr>
<td>4. Radiation Protection</td>
</tr>
</tbody>
</table>

**Grade:**

- Failed to perform a critical task: [ ]
- Max Points: [ ]
- Professional Adjustment: [ ]

*Critical Task - Grading begins at 80 for not performing critical tasks  * Inadequate identification
*Inadequate history
*Did not demonstrate standard precautions
*Wrong part
*Wrong procedure, routine
*Wrong markers or no markers
*No LMP, or Pregnancy
*If all images have to be repeated on exam with less than 4 images
*50% of the images repeated with exams with 4 or more images
*Unable to identify the proper contrast media for exam
*If the student assigns or would have assigned the wrong patient to the images taken

6/11/06 Rev 6/6/08, 3/9/09, 02/20/18, 08/20/2020, 08/20/2021
C-ARM EVALUATION MOBILE FLUOROSCOPIC EXAM FORM

Student_________________________   Date_______________

Evaluator________________________

Procedure_______________________   Facility_____________

Please check one
☐ Manipulation around sterile field  ☐ Manipulation requiring more than one projection

Medical record Number____________

Rate each area below by placing the point value in the appropriate space.

3 = The student performed the skill without assistance
2 = The student required minor assistance when performing skill.
1 = The student required major assistance when performing the skill.
0 = The student was not able to perform the skill.

PERFORMANCE EVALUATION

The student was able to:

1. Prepare equipment for use. _____
2. Move equipment into the surgical suite. _____
3. Position equipment in room. _____
4. Assist in draping the image intensifier. _____
5. Maintain sterile technique.* _____
6. Observe that the surgical staff is wearing radiation protection apparel. _____
7. Wear radiation protective apparel. _____
8. Follow surgeon’s instructions. _____
9. Manipulate the C-arm properly and according to anatomy.*

10. Fluoroscope when required.

11. Properly store images when required.

12. Attempt to reduce radiation exposure.

13. Record fluoro time (if required).

14. Dismantle the equipment upon completion of procedure.

15. Disinfect equipment upon completion of procedure.

* Critical task – Grading begins at 80 for contamination or if the technologist has to perform the procedure.

Performance Total __________ / 45 Max. points = ____%

Grading Scale: Minimum of 80% for successful completion of competency.

COMMENTS:

The student’s signature indicates that the student has reviewed the evaluation and does not indicate agreement.

_________________________________________   ______________________ R.T. (R)
Student Signature                  Evaluator Signature
NAUGATUCK VALLEY COMMUNITY COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM

PROFESSIONAL BEHAVIOR / CLINICAL SKILL ASSESSMENT

____________________________            ____________  
Student                  Term

________________                ____________
Affiliate                  Date

The following evaluation is used to assess the student’s professional role and clinical skills. It is used during RAD 197, 198, 199, 297, 298, & 299. Please read each statement carefully before assigning the student a rating. Evaluate the student on their abilities, length of time in the program, and level of expectation. To receive a rating of “4” the student must have consistently demonstrated that behavior / skill.

PROFESSIONAL ROLE / BEHAVIOR EXPECTATION

COMMITMENT TO LEARNING – the ability of the student to report to clinical prepared for their clinical assignments and to be up to date with past & current readings/procedures.

_____ The student is consistently prepared for the clinical assignment. Demonstrates evidence or having read & studied for their rotation. This is consistently evident by the demonstration of procedures assigned during their rotation at their current level of expectation. (4 points)

_____ The student demonstrated evidence of not being prepared for their clinical assignment on at least 3 occasions. (3 points)

_____ The student demonstrated evidence of not being prepared for their clinical assignment on at least 5 occasions. (1 point)

_____ The student demonstrated evidence of not being prepared for their clinical assignment on more than 5 occasions and is not responding or demonstrating corrective action recommended by clinical instructor (0 point).

PATIENT RAPORT – the ability of the student to communicate and interact with their patients.

_____ The student consistently responds to patient requests, explains procedures, demonstrates compassion/concern, and respects patient privacy. (4 points)

_____ The student usually responds to patient requests, explains procedures, demonstrates compassion/concern, and respects patient privacy. (3 points)
The student communicates with the patient only as necessary and occasionally demonstrates compassion/concern for the patient. (2 points)

The student consistently displays poor tact and communication with patients and does not appropriately address patient, answer questions, nor respond to patient needs or requests. (1 point)

INITIATIVE – the ability of the student to seek work, remain busy, assist others, remain in the department, and report for each assignment prepared.

The student consistently remains busy and is a self-starter that actively seeks work, volunteers to help other, and desires to learn. (4 points)

The student often remains busy seeking work, assisting others, and remaining available. (3 points)

The student accepts work as assigned and on occasion seeks work or assist others (2 points)

The student rarely or never seeks work and participates only if requested. The student often observes rather than participates. (1 points)

ATTENDANCE / PUNCTUALITY – the attendance and promptness of the student throughout the semester.

The student is consistently present and on time. (4 points)

The student had one absence, one tardy, or one occasion when post conference was not attended. (3 points)

The student had 2 occurrences or combinations of being absent, late, or not attending post conference. (2 points)

The student had 3 occurrences or combinations of being absent, late, or not attending post conference. (1 points)

The student had 4 occurrences or combinations of being absent, late, or not attending post conference. (0 point)

PERSONAL APPEARANCE

The student presents a professional appearance and consistently dresses according to program policy. (4 points)

The student’s appearance is usually professional and uniform is usually clean and neat. (3 points)

The student’s appearance is satisfactory but did not dress according to policy on at least one occasion. (2 points)
The student’s appearance is unsatisfactory– uniform is consistently untidy or did not dress according to policy on more than two occasions. (1 point)

**JUDGEMENT** – the ability of the student to practice according to theoretical knowledge, reason, and use discretion when carrying out assignments.

- The student consistently makes appropriate decisions and practices radiologic technology based upon theoretical knowledge. (4 points)
- The student usually makes decisions and practices radiologic technology based upon theoretical knowledge. (3 points)
- The student demonstrates some ability to reason and make decisions according to principles and practices. (2 points)
- The student uses poor or illogical decision making skills demonstrated. (1 points)

**COOPERATION AND INTERPERSONAL SKILLS** – the ability to communicate, listen to suggestions for improvement, and promote team work with instructors, staff, and fellow classmates.

- The student consistently works well with others and promotes team work. The student demonstrates respect for authority. The student listens and follows instructions and recommendations (4 points).
- The student usually works well with others, listens to suggestions, modifies behavior, and get along well with others. (3 points)
- The student at times works well with others, listens to suggestions, modifies behavior, and gets along well with others. (2 points)
- The student is often short tempered, lacks diplomacy, and may be curt or rude with others. (1 point)
- The student consistently demonstrates poor working relationship with others. (0 points)

**ADAPTATION / PERFORMANCE UNDER PRESSURE** – the ability to adapt to new experiences as well as remain calm during critical or busy situations.

- The student readily adapts to new experiences or remains calm in the event of an emergency. (4 points)
- The student usually adapts to and usually can handle busy or critical situations. (3 points)
- The student demonstrated some difficulty at times in adapting or handling a busy situation. (2 points)
- The student demonstrated frustration often and on occasion loses temper. (1 point)
The student cannot adapt or handle a critical situation. (0 points)

**CLINICAL SKILLS ASSESSMENT**

**PATIENT CARE / ASSESSMENT** – the ability of the student to lift/move patients, recognize emergencies, perform proper history/assessment prior to beginning procedure, maneuver equipment (IV’s, tubes, wheelchairs), demonstrate universal standards, perform sterile technique, and prepare contrast media at current level of expectation.

_____ The student consistently demonstrates proper patient care techniques, patient equipment manipulation, and practices universal standards at all times. (4 points)

_____ The student usually demonstrates proper patient care techniques, patient equipment manipulation, and practices universal standards. (3 points)

_____ The student is inconsistent in demonstrating patient care techniques (2 points)

_____ The student’s patient care techniques are lacking and the student is marginal in terms of patient safety. (1 point)

_____ The student is unsafe and never demonstrates appropriate patient care techniques. (0 points)

**QUALITY OF WORK** – the ability of the student to complete tasks with accuracy and thoroughness, as well as neatly. The number of times the student repeats is also evaluated.

_____ The student consistently meets the highest standards for accuracy, thoroughness, and neatness. (4 points)

_____ The student’s work is satisfactorily completed with accuracy, thoroughness, neatness, and the student recognizes errors and takes the appropriate corrective action. Radiographic repeats would be minimal. (3 points)

_____ The student makes errors during experiences and at times and the student does not always recognize the mistake. Some repeats would occur. (2 points).

_____ The student frequently makes errors and demonstrates some difficulty in recognizing the error or taking corrective action. Numerous repeats would occur. (1 point)

_____ Work quality is poor and there are repeated mistakes without recognition of the error or performing corrective action. Numerous repeats would occur. (0 points).

**QUANTITY OF WORK** - the volume of work accomplished by the student.
_____ The student’s work productivity is high and the student consistently does more than expected and in a timely manner. (4 points).

_____ The student’s satisfactorily completes work in time expected. (3 points)

_____ The student’s work is completed but often exceeds the amount of time expected to complete the assignment (2 points).

_____ The student’s tasks are completed slowly or at times not completed at all (1 point).

**PERFORMANCE OF RADIOGRAPHIC PROCEDURES** – the ability of the student to perform procedures, assess the requisition, apply the affiliate routine, process the radiograph, and obtain radiologist interpretation when required.

_____ The student demonstrates consistency in applying knowledge and performing radiologic procedures. (4 points)

_____ The student demonstrates satisfactory knowledge of the concepts to produce radiographs. (3 points)

_____ The student demonstrates adequate knowledge of the concepts to produce radiographs. (2 points)

_____ The student consistently cannot produce quality radiographs. (1 point)

**ORGANIZATION OF WORK**- the ability of the student to perform tasks in an orderly fashion and in a manner that does not disrupt affiliate work flow and accommodates the patient.

_____ The student consistently organizes their work without assistance and in a manner that does not disrupt departmental activity. The work is performed in a manner that accommodates the patient. (4 points)

_____ The student satisfactorily organizes their work in a manner that does not disrupt departmental activity. The work is performed in a manner that accommodates the patient. (3 points)

_____ The student has difficulty organizing their work and at times disrupts departmental activity. The work often does not accommodate the patient. (2 points)

_____ The student lacks organization. (1 point)

**RADIATION PROTECTION** - the ability of the student to demonstrate proper radiation protection to self and patient. Shielding is performed 100% of the time on all patients. Female patients within childbearing age are questioned about the possibility of pregnancy and the date of the LMP is properly documented.
Radiation protection procedures and possibility of pregnancy is performed at all times. (4 points)

Satisfactorily performs radiation protection and pregnancy screening. (3 points).

Usually applies appropriate protection techniques and pregnancy screening. (2 points)

The student often does not protect patient, self, and perform pregnancy screening. (1 point)

The student is unsafe in performing radiation protection procedures and pregnancy screening. (0 points)

EQUIPMENT MANIPULATION - the ability of the student to properly manipulate the bucky, table locks, girds, mobile, fluoroscopic units, digital units, control panels, and adjust techniques as needed.

The student consistently demonstrates proficiency in using the equipment and adjusting techniques when required. (4 points)

The student satisfactorily demonstrates proficiency in using the equipment and adjusting techniques when required. (3 points)

The student at times has difficulty utilizing equipment and adjusting techniques. (2 points)

The student is unsatisfactory when manipulating equipment or compensating techniques. (1 point)

Comments / Suggestion for corrective action:

Points earned / 56 maximum possible points =

The signature of the student does not indicate agreement with the evaluation. The signature indicates the student has seen the evaluation. The student has the right to write comments on the back of the evaluation.

Student signature

Instructor signature

Final Average Grade

2/10/99

Revised 3/29/00, 5/23/01, 6/17/02

Review 3/26/13, 2/20/18, 8/20/2021
This evaluation is used to assess the student's performance during their rotation at affiliates other than the hospital.

**RATING SCALE**

4 = Competent - The student consistently performs in an effective manner.

3 = Progress acceptable - The student often performs effectively & efficiently.

2 = Needs Improvement - The student does not perform task a majority of the time.

1 = Progress unacceptable - The student does not demonstrate the task and is consistently ineffective & inefficient.

Listed are the areas to evaluate the student on his/her performance at your agency. Read and consider each objective before making your decision, then circle the appropriate rating. REMEMBER TO BE GIVEN A RATING OF 4 ON THE SCALE THE STUDENT MUST DEMONSTRATE THIS BEHAVIOR 100% OF THE TIME.

**I. PERFORMANCE:** The student performs radiographic examinations with direct or indirect supervision of the clinical instructor

1. Performs radiographic exams according to affiliate procedure manual. 1 2 3 4

2. Follows suggestions and instruction. 1 2 3 4
3. Performs associated duties. 1 2 3 4
4. Adapts knowledge to affiliate procedures. 1 2 3 4

5. Organizes work and completes tasks. 1 2 3 4
6. Cooperates with staff and instructors. 1 2 3 4

II. **PROFESSIONAL ROLE:** Student displays professional behavior which includes legal requirements and patient care responsibilities.

1. Communicates and interacts with patients and families in a concerned, professional manner. 1 2 3 4
2. Practices universal precautions and follows regulated waste policy. 1 2 3 4
3. Dresses according to program policy. 1 2 3 4
4. Questions female patients concerning the possibility of pregnancy and documents last menstrual period. 1 2 3 4
5. Labels radiographs accurately including patient name, date, and side marker. 1 2 3 4
6. Maintains patient confidentiality. 1 2 3 4
7. Reports to affiliate on time. 1 2 3 4
8. Checks patient ID, medical history and documents requisition. 1 2 3 4

III. **EQUIPMENT:** Student uses radiographic equipment and devices according to affiliate policy.

1. Consistently shields all patients using aprons, gonadal shields, and breast shielding. 1 2 3 4
2. Processes radiographs according to affiliate policy. 1 2 3 4
3. During fluoroscopy uses proper radiation protection for self by wearing aprons, thyroid shield, (if available) and
collar badge.  

4. Stocks work area with adequate levels of supplies.  

5. Operates radiographic equipment with proper collimation, SID, image-tube alignment, and technical factors.  

6. Uses image receptors and grids appropriately for radiographic procedures.  

7. Operates computed radiography system.  

GRADING: This evaluation will be completed at the end of the student's rotation in a clinical affiliate other than the hospitals. The affiliate grade is averaged with the clinical quiz grades.  

TOTAL POINTS: _____________ / 80 (84 if affiliate has CR) MAX. POINTS = _________%  

COMMENTS:  

______________________________
Student Signature  

______________________________ R.T. (R)  
Instructor's Signature  

Revised  1/24/96, 5/23/01  
Reviewed: 3/26/13, 2/10/17, 08/20/2020, 08/20/2021  
SAVE: j drive eval folder
NAUGATUCK VALLEY COMMUNITY COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM

INSTRUCTOR’S KEY - CLINICAL AFFILIATE EVALUATION

**PERFORMANCE:** The student performs radiographic examinations with direct or indirect supervision of the clinical instructor.

1. Performs radiographic exams according to affiliate procedure manual.

4 = Performs procedures according to policy and requisition 100% of the time.

3 = Performs procedures according to routine most of the time. Occasionally positions or begins the wrong routine.

2 = Rarely performs the correct routine and on at least one occasion attempted to radiograph the wrong part or patient (Ex left shoulder when request was for right).

1 = Cannot perform the correct routine at all. Demonstrates constant confusion with routines and positions.

(NOTE: The above is based on the current level of knowledge the student possesses. The student should not be evaluated on positions/procedures they have not been taught)

2. Follows suggestions and instruction.

4 = Consistently listens to and follows instructions. Readily accepts constructive criticism. Is not argumentative and values assistance from staff and the instructor.

3 = Usually listens to and follows instructions. Often accepts constructive criticism. On two occasions became argumentative or provided an excuse rather than accept responsibility.

2 = Did not follow instructions on more than two occasions. Does not accept constructive criticism easily. When corrected often replies with an excuse instead of admitting to his/her mistake.

1= Never listens or follows instructions. Becomes argumentative on any suggestions. Consistently provides an excuse for their actions. Never accepts responsibility for their judgment.
3. Performs associated duties.

4 = Consistently willing to help with such tasks as: cleaning equipment, processing radiographs, assisting patients in changing, assisting office staff, and physicians/physicians’ assistants (other tasks may be evaluated at the discretion of the instructor).

3 = Usually performs associated tasks but on at least two occasions did not. (see above for tasks)

2 = On more than two occasions did not perform associated tasks (see tasks above)

1 = Never performs an associated task.

4. Adapts knowledge to affiliate procedures.

4 = Easily adapts to affiliate and applies current level of knowledge to the procedures/routines to the assigned affiliate.

3 = Readily adapted to affiliate. On two occasions demonstrated difficulty in applying current level of knowledge to affiliate procedures/routines.

2 = Some difficulty in adapting to affiliate. On more than two occasions demonstrated difficulty in applying current level of knowledge to affiliate procedures/routines.

1 = Did not adapt at all. Could not apply current knowledge to practice.

5. Organizes work and completes tasks.

4 = All tasks are completed thoroughly. The faculty/staff never have to remind the student to complete task began but not finished. Work is organized in a fashion that will expedite the completion of a procedure in a timely manner. Organization of work is in the best interest of the patient. The student handles pressure in busy situations.

3 = On at least two occasions the student did not complete a task. (This is two occasions and involves the same task, not two different tasks) Work is usually organized to complete tasks and procedures in a timely manner. The student can handle pressure in most situations.

2 = Faculty/staff often remind student to complete tasks. Student does not demonstrate good organizational skills that will facilitate the completion of the tasks. In busy situations the student gets frustrated.
1 = Faculty/staff consistently must remind student to complete tasks. The student does demonstrate good organizational work. The work does not expedite the completion of a task or procedure in a timely fashion. The faculty often have to complete the task or take over the procedure from the student. In busy situations the student gets frustrated and easily loses temper.

   (NOTE: If workload becomes heavy and the instructor must complete a procedure, the student should not be penalized unless the backlog is a direct result of the student's inability to complete tasks or organize their work)

6. Cooperates with staff and instructors.

4 = Consistently polite and willing to assist in any way possible. The student participates as a "team player." Uses tact, diplomacy when dealing with affiliate employees.

3 = On one occasion the student was rude or curt.

2 = On two occasions the student was rude or curt.

1 = On more than two occasions the student was rude or curt towards faculty/staff.

II. PROFESSIONAL ROLE: Student displays professional behavior which includes legal requirements and patient care responsibilities.

   1. Communicates and interacts with patients and families in a concerned professional manner.

4 = The student easily communicates and interacts with patients and families. Language is appropriate. The student uses and modifies terms a level the patient/family can understand. The student is friendly and cheerful.

3 = On at least two occasions the student did not appropriately communicate with patients/family. The student did not modify their communication/instruction. On at least two occasions the student was not pleasant or cheerful when interacting with patient/family.

2 = The student's communication and interaction needs improvement. Demonstrates some difficulty when communicating with the patient/family. Has difficulty in answering questions and modifying their communication.

1 = Avoids talking with patient/family. Appears shy/withdrawn. Has difficulty in starting conversation. Is not cheerful or pleasant.
(NOTE: When evaluating these criteria, the instructor needs to consider at what point the student is in the program. For example, a first year first month student will demonstrate some difficulty as compared to a second year first semester student. Terms of endearment when addressing patients are not acceptable.)

2. Practices standard precautions and follows regulated waste policy.
4 = Consistently practices universal precautions. Disposes waste appropriately. The faculty and staff never have to remind the students to wear gloves, mask etc.

3 = On one occasion the student did not follow precautions or dispose of waste properly.

2 = On two occasions the student did not follow universal precautions or properly dispose of waste.

1 = On more than two occasions the student did not follow universal precautions or properly dispose waste.

3. Dresses according to program policy.

Policy requires a white lab coat (worn at all times), white shoes/sneakers (no color on sneakers), white pants/skirt and colored top, (Blue or Sangria). The student is to have a watch with a second hand. Long hair is to be tied back. Only stud earrings. No jewelry other than a wedding band. No nail polish. The uniform should be neat and clean.

4 = Dressed according to above policy 100% of the time.

3 = On one occasion the student did not dress according to policy.

2 = On two occasions the student did not dress according to policy.

1 = On more than two occasions the student did not dress according to policy.

4. Question female patients concerning the possibility of pregnancy and last menstrual period.

4 = Questions female patients concerning the possibility of pregnancy 100% of the time. Documents LMP 100% of the time.

3 = On one occasion did not question patient concerning the possibility of pregnancy. On one occasion did not document LMP.
2 = On two occasions did not question patient concerning the possibility of pregnancy. On two occasions did not document LMP.

1 = On more than two occasions did not question female patients concerning the possibility of pregnancy. On more than two occasions did not document LMP.

5. **Labels radiographs accurately including patient name, date, and side marker.**

4 = Properly labeled radiographs and used side markers 100% of the time.

3 = On one occasion did not properly label images or use side marker.

2 = On two occasions did not properly label image or use side marker.

1 = On more than two occasions did not properly label image or use side marker.

6. **Maintains patient confidentiality.**

4 = Never discusses confidential information concerning patients or the business of other affiliates.

3 = On one occasion the student discussed patient information or the business of other affiliates.

2 = On two occasions the student discussed patient information or the business of other affiliates.

1 = On more than two occasions the student discussed patient information or the business of other affiliates.

7. **Reports to affiliate on time.**

4 = Reported to affiliate on time & prepared 100% of the time.

3 = On one occasion the students were late or not prepared.

2 = On two occasions the students were late or not prepared.

1 = On more than two occasions the students were late or not prepared.

8. **Checks patient ID, medical history, and documents requisition.**
4 = Checks patient ID, medical history and documents (as necessary) requisition 100% of the time.

3 = On one occasion, the student did not check ID, medical history, or document requisition.

2 = On two occasions, the student did not check ID, medical history, or document requisition.

1 = On more than two occasions, the student did not check ID, medical history, or document requisition.

III. EQUIPMENT: Student uses radiographic equipment and devices according to affiliate policy.

1. **Consistently shields all patients using aprons, gonadal shields, and breast shielding.**
   4 = Shields patients 100% of the time.

   3 = On one occasion did not shield patient.

   2 = On two occasions did not shield patient.

   1 = On more than two occasions did not shield patient.

2. **Processes radiographs according to affiliate policy.**

   4 = Processes radiographs consistently and with accuracy.

   3 = On two occasions did not properly process radiograph.

   2 = On more than two occasion did not properly process radiographs.

   1 = Never processed radiographs.

3. **During fluoroscopy uses proper radiation protection for self by wearing aprons, thyroid shield (if available) and collar badge.**

   4 = Wears protective apparel properly and places collar badge outside lead apron 100% of the time.
3 = On one occasion did not wear apparel properly or place the collar badge outside the lead apron.

2 = On two occasions did not wear apparel properly or did not place the collar badge outside the apron.

1 = On more than two occasions did not wear proper apparel or did not place the collar badge outside the apron.

4. Stocks work area with adequate levels of supplies.

4 = The work area is always stocked. The faculty/staff never have to remind the student to replace supplies.

3 = On two occasions the student was reminded to maintain supplies.

2 = On more than two occasions the student had to be instructed to replace supplies.

1 = The student never replaces supplies is constantly being reminded by faculty/staff.

5. Operates radiographic equipment with proper collimation, SID, image-tube alignment, and technical factors.

4 = Equipment is used properly. The student demonstrates the correct relationship of technical factors and image quality.

3 = On two occasions the student did not properly use equipment, align tube with image receptor, center tube to buck, set technique, etc.

2 = On more than two occasions the student did not properly use equipment, align tube with receptor, center tube to buck, set technique, etc.

1 = The student never properly used equipment, align tube with image, center tube to buck, set technique, etc.

6. Uses image receptors and grids appropriately for radiographic procedures.

4 = Receptors/grids consistently used properly.

3 = On two occasions the student did not properly use receptors or grids.
2 = On more than two occasions the student did not properly use receptors/grids.

1 = The student never properly used receptors/grids.

7. Operates Computed Radiography system.

4 = Operates CR system satisfactorily. Images or patient data were not lost.

3 = On two occasions lost images or had difficulty with CR system.

2 = On three occasions lost images or had difficulty with CR system.

1 = On four occasions lost images or had difficulty with CR system.
A. Student Health Requirements

NAUGATUCK VALLEY COMMUNITY COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM

APPENDIX A
Student Health Requirements

Reviewed: 2/20/18, 8/20/2020, 08/20/2021
Revised: 2/20/18

Policy

Physical exams are required within three months of admission into the Radiologic Technology Program. Exam documents are to be submitted and completed before a student can attend clinical experiences. At the cost to the student, Castle Branch Inc. which provides colleges, universities and other education institutions nationwide with background screening and compliance management solutions, including background checks, drug testing, immunization and record tracking and document management provides the management and compliance of all radiologic technology students.

Procedure

i. Health requirement forms are mailed by the Program Director in the information packet in May. They may also be found in the Castle Branch Radiologic Technology portal (see instructions following page).

ii. Students use the physician of their choice. The form or forms are uploaded to the Castle Branch portal.

iii. The exam requires immunization history, MMR, TB test, Varicella, Tdap, and Hepatitis B. The Hepatitis B vaccine also requires a titer or if they did not convert a waiver. During the second year, students are required to receive an updated TB test.

iv. The Radiologic Technology Program Director or Clinical Coordinator will confirm in writing to each hospital clinical affiliate the names of the students they are assigned and the student is compliant with health requirements. The letter is sent prior to the students beginning their clinical rotations. The hospitals must receive the letter before the semester starts. The letter begins the process of giving the students ID badges.

v. Students seeking accommodations are required to submit medical documentation to the Disability Services office. If the accommodation is granted faculty that is assigned the student will be informed of the student’s accommodation.

vi. Connecticut hospitals require all students and faculty receive the flu vaccine. Some clinical affiliates will inoculate faculty and students for free. Other affiliates will not. Students or faculty that
decline the vaccine for health or religious reasons will be required to wear a mask at all times when in clinical during the flu season.

Medical requirements recording for incoming fall 2017 Radiologic Technologists NVCC
Go to below web site
1. https://portal.castlebranch.com/nw41
2. Pick package selection, click please select and go down to NW44bgim: I am an incoming freshman and need to order my Background Check & Compliance Tracker
3. Create an account
4. Go to do list and scan in your documents
B. Program Technical Standards

Naugatuck Valley Community College
Radiologic Technology Program
Technical Standards

Reviewed: 2/21/2018, 8/24/2019, 08/18/20, 08/20/2021
Revised: 2/21/2018

Candidates for admission to the Radiologic Technology program should consider the physical demands required of a radiographer. Reasonable accommodations may be made to assist the student in meeting the program's objectives. A request for an accommodation is evaluated on a case by case basis, and after the candidate/student has disclosed their condition. The evaluation for accommodations includes supporting medical documentation and may require the simulation of a required skill.

During the clinical education the radiologic technology student will:

1. Be on their feet 100% of the time during an eight-hour clinical day.
2. Lift and move patients from stretchers and wheelchairs to the radiographic table.
3. Lift and position non-ambulatory or unresponsive patients.
4. Bending over to pick up equipment including but not restricted to lifting foot boards to be attached to the table or image receptors to be carried to the CR Reader.
5. Drive and steer a mobile radiographic machine. The machine is motorized. However, when driving the machine, the student will be expected to make sudden stops and turns to avoid beds, equipment, and pedestrians.
6. Manipulate the radiographic tube crane and fluoro tower into various positions when performing radiographic procedures. This often requires reaching above one’s head with 2 hands to move the tube.
7. Respond quickly in an emergency situation. This could include, but not restricted to running while carrying or pushing equipment.
8. Carrying image receptors back and forth between the radiographic room and CR Reader or other departments within the clinical affiliate.
9. Hear effectively, audible sounds of equipment such as termination of the radiographic exposure, tube rotor, blood pressure, overhead voice page, and hospital pagers.
10. See effectively conditions or settings on equipment such as radiographic technique, termination of the radiographic exposure, angle meters, computer screens, & blood pressure gauges.
11. Communicate effectively when providing patients with instructions or questioning the patient to obtain a medical history, consent for procedures, documentation of pregnancy, or instructions during a procedure.
12. See effectively and possess motor skills to manipulate the digital imaging and Picture Archiving Communication System (PAC) to produce and store images properly.
13. Perform fluoroscopic procedures while wearing a lead apron. The apron is heavy and may need to be worn two or three hours at a time.
14. Wear a surgical mask, rubber gloves, isolation gowns, or other protective apparel. Be able to communicate with patients or staff while wearing protective apparel.
C. Procedure for reporting injuries

***Read procedure and fill out form below in accordance with this procedure.

Procedure for Reporting Injuries Occurring on Campus and College-Sponsored Activities
Effective Date: February 28, 2018

Purpose
The purpose of this procedure is to have a singular system for reporting student, employee, and visitor injuries that occur on campus and during College-sponsored activities.

Scope
This procedure applies to all employees, students, and visitors who as a result of an accident or incident on campus and/or during NVCC sponsored events are injured or exposed to hazardous substances. This procedure supersedes all other previous procedures and guidance relating to this topic.

Procedure

- **Medical emergencies should be reported to the Public Safety Department.** The responding officer will summon emergency response if deemed necessary or if requested by the injured party.
- An incident resulting in an injury or a chemical exposure to any employee, student, or visitor that occurs on campus or while participating in NVCC-sponsored activities is reported by completing the Incident Report Form (see attached) within three (3) days of the incident. Please note the following:
  - This form does NOT replace Form WC-207, First Report of Injury. When an employee is injured, the First Report of Injury Form must still be submitted to the Human Resources Department and all Worker’s Compensation procedures must be followed.
  - A report by the Public Safety Department does NOT fulfill the requirement of completing and submitting the Incident Report Form.
  - Students injured while participating in College activities may be covered by the College’s accident insurance policy. It is the student’s responsibility to follow the procedures listed in the Student Handbook in order to receive reimbursement for costs incurred.
  - When the incident involves a visitor or student, the responsible staff or faculty member ensures that the form is completed and submitted.
  - The Incident Report Form may be obtained by contacting the offices of the Dean of Student Services (203-575-8012) or Dean of Administration (203-575-8089).

- The completed form is sent to the Dean of Administration’s office, K706. A copy of the form should be given to the party involved in the incident. The DOA’s office will then send forms to either the Dean of Student Services (student injury) or Human Resources (employee injury). All others will be kept on file in the DOA’s office (i.e. visitors).

- The NVCC Health & Safety Committee will review the reports and, if warranted, their recommendations for addressing safety concerns will be reported in meeting minutes and to the appropriate division or department. In the event that immediate action is required to ameliorate a hazard, the committee will report its findings directly to the Dean of Administration and the Public Safety Department.

Questions regarding this procedure should be directed to the Deans Sarah Gager or Dana Elm.
Incident Report Form
Injury or Chemical Exposure

Directions: This form is completed when an employee, student, or visitor is injured or exposed to a chemical while on campus or during College-sponsored events. When the incident involves a student or visitor, the faculty member or NVCC sponsor of the event is responsible for completing the form. Submit the completed form to the Office of the Dean of Administration (K706) within 3 days of the incident. Alternatively, an electronic copy can be sent to delm@nv.edu.

### PERSONAL INFORMATION

<table>
<thead>
<tr>
<th>Name: (Last, First, Middle):</th>
<th>Date of Birth:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>Phone:</td>
</tr>
</tbody>
</table>

- [ ] NVCC Employee
- [ ] NVCC Student, Student ID:
- [ ] NVCC Visitor

### INCIDENT INFORMATION

<table>
<thead>
<tr>
<th>Date of Incident:</th>
<th>Time of Incident:</th>
<th>Location:</th>
</tr>
</thead>
</table>

- Nature of Incident:
- Was NVCC Public Safety Department or Security notified? [ ] yes [ ] no
- For employees, was First Report of Injury Form (WC-207) completed? [ ] yes [ ] no
- Witness name(s):
- Details of incident (include description and extent of injury and how the injury/exposure occurred):
- Describe initial action at time of injury (i.e., first aid):
- Was further medical treatment recommended? [ ] yes [ ] no If yes, by whom?
- Was injured transported for further medical treatment? [ ] yes [ ] no
- Was further treatment received? [ ] yes [ ] no If yes, where? When?
- What recommendations do you have for preventing other accidents of this type?

My signature affirms that I have reviewed this form and the information is true and correct to the best of my knowledge.

<table>
<thead>
<tr>
<th>Preparer’s Name and Title:</th>
<th>Division/Department:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparer’s Signature:</td>
<td>Date:</td>
</tr>
<tr>
<td>Signature of Injured Party:</td>
<td>Date:</td>
</tr>
</tbody>
</table>

Important Notes:
Employees - This form does not replace form WC-207, First Report of Injury, which must be submitted to Human Resources.
Students - Students may be covered by accident insurance if injured during College activities. It is the student’s responsibility to follow procedures provided in the Student Handbook in order to be reimbursed for medical costs incurred.

Reviewed 07/2019, 08/2020, 08/2021
D. Program Grading System (Trajecsys)

Trajecsys Student Grading System

The NVCC Program utilizes an electronic grade system called Trajecsys. Students will need to go on to the Trajecsys web-page to register. You may register up to 45 days prior to the first day of classes. We suggest you do so, so that you can familiarize yourself with the system. The link is: https://www.trajecsys.com/programs/registration.aspx

Any announcements made to the grading system will be listed for you under announcements. We request that students check announcements once a day. During your first weeks of training on campus the instructor will go over grading system and what you will be responsible for completing and how to access evaluations, grades, log books and other useful items.
Radiography

1. Introduction

Candidates applying for certification and registration under the primary eligibility pathway are required to meet the Professional Education Requirements specified in the ARRT Rules and Regulations. ARRT’s Radiography Didactic and Clinical Competency Requirements are one component of the Professional Education Requirements.

The requirements are periodically updated based upon a practice analysis which is a systematic process to delineate the job responsibilities typically required of radiographers. The result of this process is a task inventory which is used to develop the clinical competency requirements (see section 4 below) and the content specifications which serve as the foundation for the didactic competency requirements (see section 3 below) and the examination.

2. Documentation of Compliance

Verification of program completion, including Didactic and Clinical Competency Requirements and all degree-related requirements including conferral of the degree, will be completed on the Program Completion Verification Form on the ARRT Educator Website after the student has completed the Application for Certification and Registration.

Candidates who complete their educational program during 2022 or 2023 may use either the 2017 Didactic and Clinical Competency Requirements or the 2022 requirements. Candidates who complete their educational program after December 31, 2023 must use the 2022 requirements.

3. Didactic Competency Requirements

The purpose of the didactic competency requirements is to verify that individuals had the opportunity to develop fundamental knowledge, integrate theory into practice and hone affective and critical thinking skills required to demonstrate professional competence. Candidates must successfully complete coursework addressing the topics listed in the ARRT Content Specifications for the Radiography Examination. These topics would typically be covered in a nationally-recognized curriculum such as the ASRT Radiography Curriculum. Educational programs accredited by a mechanism acceptable to ARRT generally offer education and experience beyond the minimum requirements specified in the content specifications and clinical competency documents.

4. Clinical Competency Requirements

The purpose of the clinical competency requirements is to verify that individuals certified by the ARRT have demonstrated competence performing the clinical activities fundamental to a particular discipline. Competent performance of these fundamental activities, in conjunction with mastery of the cognitive knowledge and skills covered by the certification examination, provides the basis for the acquisition of the full range of procedures typically required in a variety of settings. Demonstration of clinical competence means that the candidate has performed the procedure independently, consistently, and effectively during the course of his or her formal education. The following pages identify the specific procedures for the clinical competency requirements. Candidates may wish to use these pages, or their equivalent, to record completion of the requirements. The pages do NOT need to be sent to the ARRT.
4.1 General Performance Considerations

4.1.1 Patient Diversity

Demonstration of competence should include variations in patient characteristics such as age, gender, and medical condition.

4.1.2 Elements of Competence

Demonstration of clinical competence requires that the program director or the program director’s designee has observed the candidate performing the procedure independently, consistently, and effectively during the course of the candidate’s formal educational program.

4.1.3 Simulated Performance

ARRT defines simulation of a clinical procedure routinely performed on a patient as the candidate completing all possible hands-on tasks of the procedure on a live human being using the same level of cognitive, psychomotor, and affective skills required for performing the procedure on a patient.

ARRT requires that competencies performed as a simulation must meet the same criteria as competencies demonstrated on patients. For example, the competency must be performed under the direct observation of the program director or program director’s designee and be performed independently, consistently, and effectively.

Simulated performance must meet the following criteria:

- Simulation of imaging procedures requires the use of proper radiographic equipment without activating the x-ray beam.
- A total of ten imaging procedures may be simulated. Imaging procedures eligible for simulation are noted within the chart (see section 4.2.2).
- If applicable, the candidate must evaluate related images.
- Some simulations are acceptable for General Patient Care (see section 4.2.1). These do not count toward the ten imaging procedures that can be simulated.

4.2 Radiography-Specific Requirements

As part of the education program, candidates must demonstrate competence in the clinical procedures identified below. These clinical procedures are listed in more detail in the following sections:

- Ten mandatory general patient care procedures;
- 36 mandatory imaging procedures;
- 15 elective imaging procedures selected from a list of 34 procedures;
- One of the 15 elective imaging procedures must be selected from the head section; and
- Two of the 15 elective imaging procedures must be selected from the fluoroscopy studies section.

One patient may be used to document more than one competency. However, each individual procedure may be used for only one competency (e.g., a portable femur can only be used for a portable extremity or a femur but not both).
4.2.1 General Patient Care Procedures

Candidates must be CPR/BLS certified and have demonstrated competence in the remaining nine patient care procedures listed below. The procedures should be performed on patients whenever possible, but simulation is acceptable if state regulations or institutional practice prohibits candidates from performing the procedures on patients.

<table>
<thead>
<tr>
<th>General Patient Care Procedures</th>
<th>Date Completed</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPR/BLS Certified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vital Signs – Blood Pressure</td>
<td></td>
<td></td>
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<tr>
<td>Vital Signs – Temperature</td>
<td></td>
<td></td>
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<tr>
<td>Vital Signs – Pulse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vital Signs – Respiration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vital Signs – Pulse Oximetry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterile and Medical Aseptic Technique</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venipuncture*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assisted Patient Transfer (e.g., Slider Board, Mechanical Lift, Gait Belt)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care of Patient Medical Equipment (e.g., Oxygen Tank, IV Tubing)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Venipuncture can be simulated by demonstrating aseptic technique on another person, but then inserting the needle into an artificial forearm or suitable device.

4.2.2 Imaging Procedures

Institutional protocol will determine the positions and projections used for each procedure. When performing imaging procedures, the candidate must independently demonstrate appropriate:

- patient identity verification;
- examination order verification;
- patient assessment;
- room preparation;
- patient management;
- equipment operation;
- technique selection;
- patient positioning;
- radiation safety;
- image processing; and
- image evaluation.
### 4.2.2 Imaging Procedures (continued)

<table>
<thead>
<tr>
<th>Imaging Procedures</th>
<th>Mandatory or Elective</th>
<th>Eligible for Simulation</th>
<th>Date Completed</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chest and Thorax</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chest Routine</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chest AP (Wheelchair or Stretcher)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ribs</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chest Lateral Decubitus</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sternum</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Airway (Soft-Tissue Neck)</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sternoclavicular Joints</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Upper Extremity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thumb or Finger</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wrist</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forearm</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Elbow</td>
<td>✓</td>
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</tr>
<tr>
<td>Humerus</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoulder</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clavicle</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scapula</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Joints</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trauma</strong>: Shoulder or Humerus</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Scapular Y, Transthoracic or Axial)*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trauma</strong>: Upper Extremity (Non-Shoulder)*</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lower Extremity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toes</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foot</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ankle</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knee</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tibia-Fibula</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Femur</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patella</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcaneus</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trauma</strong>: Lower Extremity*</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Trauma requires modifications in positioning due to injury with monitoring of the patient’s condition.
### 4.2.2 Imaging Procedures (continued)

<table>
<thead>
<tr>
<th>Imaging Procedures</th>
<th>Mandatory or Elective</th>
<th>Eligible for Simulation</th>
<th>Date Completed</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mandatory</td>
<td>Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Head</strong> — Candidates must select at least one elective procedure from this section.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skull</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Facial Bones</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mandible</td>
<td>✓</td>
<td>✓</td>
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### 4.2.2 Imaging Procedures (continued)

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<th>Imaging Procedures</th>
<th>Mandatory or Elective</th>
<th>Eligible for Simulation</th>
<th>Date Completed</th>
<th>Competence Verified By</th>
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<td><strong>Fluoroscopy Studies</strong> — Candidates must select two procedures from this section and perform per site protocol.</td>
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