

RADIOLOGIC SCIENCE

VTC STUDENT HANDBOOK for RADIOLOGIC SCIENCE

Welcome

Welcome to the Vermont Technical College (VTC) Radiologic Sciences department. Thank you for choosing Radiologic Science and are pleased that you are a student within our program. This handbook has been designed to share with you specific Radiologic Science department information.

- The faculty's beliefs about Radiologic Science and education
- The framework upon which the program is taught
- The expected outcomes for our students
- The behavioral expectations of our students
- The policies that govern your progression through the program

We are excited to work with you as you progress toward your goal of becoming a licensed Radiologic Technologist.

Radiologic Sciences Program Philosophy

In keeping with the mission of Vermont Technical College, as well as that of the American Registry of Radiologic Technologists, the Associate of Science Degree in Radiologic Sciences Program philosophy is grounded in the beliefs that:

Medical Imaging is a learned profession. Caring is the essence of all health professionals and the most central and unifying focus for medical imaging practice. The practice of medical imaging includes verbal and nonverbal caring behaviors and technical competence.

Medical Imaging's goal is to provide imaging services that aid in promotion, maintenance and restoration of health.

Health is the effective interaction with one's environment, is unique to the individual and is culturally determined.

Individuals are unique biological, psychological, sociological beings, capable of caring by virtue of their humanness.

The environment and the individual have a reciprocal relationship, thereby creating a holistic framework of existence. Caring sets up the possibility for giving and receiving help. A caring environment is one in which an individual can develop his/her potential.

The learner is an active participant in the educational process and assumes responsibility for learning. The educator is the facilitator in this process.

Radiologic Science education allows for the journey of caring and nurturing going hand in hand with technical skills. The art and science of medical imaging are intertwined and grounded in giving of a responsible self.

Vermont Technical College's Associate of Science degree in Radiologic Sciences Program fulfills its commitment to the community and the ever changing needs of society by providing imaging practitioners who are generalists prepared for entry level radiologic imaging in various health care agencies.

Code of Ethics

The Code of Ethics set forth by the American Registry of Radiologic Technologists (ARRT) serves as a guide for Radiologic Sciences Program students at Vermont Technical College. It is used to evaluate student conduct as it relates to professionalism with patients, healthcare consumers, program faculty, clinical site health care team members and peers. Maintaining a high level of ethical conduct comes from adherence to this code and provides protection, comfort and safety for patients.

ARRT Standards of Ethics

1. The radiologic technologist acts in a professional manner, responds to patient needs, and supports colleagues and associates in providing quality patient care.
2. The radiologic technologist acts to advance the principle objective of the profession to provide services to humanity with full respect for the dignity of mankind.
3. The radiologic technologist delivers patient care and service unrestricted by the concerns of personal attributes or the nature of the disease or illness, and without discrimination on the basis of sex, race, creed, religion, or socio-economic status.
4. The radiologic technologist practices technology founded upon theoretical knowledge and concepts, uses equipment and accessories consistent with the purpose for which they were designed, and employs procedures and techniques appropriately.
5. The radiologic technologist assesses situations; exercises care, discretion, and judgment; assumes responsibility for professional decisions; and acts in the best interest of the patient.
6. The radiologic technologist acts as an agent through observation and communication to obtain pertinent information for the physician to aid in the diagnosis and treatment of the patient and recognizes that interpretation and diagnosis are outside the scope of practice for the profession.
7. The radiologic technologist uses equipment and accessories, employs techniques and procedures, performs services in accordance with an accepted standard of practice, and demonstrates expertise in minimizing radiation exposure to the patient, self, and other members of the healthcare team.

8. The radiologic technologist practices ethical conduct appropriate to the profession and protects the patient's right to quality radiologic technology care.
9. The radiologic technologist respects confidences entrusted in the course of professional practice, respects the patient's right to privacy, and reveals confidential information only as required by law or to protect the welfare of the individual or the community.
10. The radiologic technologist continually strives to improve knowledge and skills by participating in continuing education and professional activities, sharing knowledge, and investigating new aspects of professional practice.

Radiologic Science Student Outcomes

Programmatic Outcomes

1. Students will use algorithmic reasoning when determining exposure factors to obtain diagnostic quality radiographs with minimum radiation exposure
2. Students will practice radiation protection for the patient, self and others
3. Students will position the patient and imaging system to perform optimum radiographic examinations on patients throughout the life span
4. Students will use effective non-verbal, oral and written communication in patient care to anticipate and provide basic care and comfort, patient education as well as for professional relationships
5. Students will exercise critical-thinking and discretion in the technical performance of medical imaging procedures consistent with current standards of practice
6. Students will support cultural/social awareness when providing medical imaging procedures
7. Students will appraise patient information from multiple sources to perform medical imaging procedures consistent with the scope of practice
8. Students will appreciate the importance of life-long learning for the purpose of maintaining current standards of practice

Student Expectations

Code of Conduct

Students will at all times conduct themselves in a manner that serves to maintain, promote, and enhance a high quality academic environment. To this end, it is expected that all members of the learning community will adhere to the following guidelines:

1. Students are expected to attend all regularly scheduled classes
2. Students are expected to arrive prepared for class and on time, and they will remain in class until class is dismissed

3. Students will treat all members of the learning community with respect. Toward this end, they will promote collegial discourse and free exchange of ideas by listening with civil attention to comments made by all individuals
4. Students are to maintain an appropriate academic climate by refraining from all actions that disrupt the learning environment. Cell phones may not be used in class or clinical/preceptorship areas unless directed by the instructor/preceptor. Students must follow clinical affiliate policies, including use of cell phones and social media
5. No minors are permitted in the classroom/learning environment at any time unless approved by the instructor.

Missed Exam Policy

Ten (10) points (based on 0-100%) will be deducted from any exam score when the exam is taken after the scheduled exam period. It is the student's responsibility to schedule the exam make-up time with the instructor. Exam must be made up, at the instructor's convenience, within seven (7) days of the original exam administration time or the student will earn a score of zero (0) on that exam.

Exceptions to the ten point deduction will be granted for the following circumstances:

1. Death of an immediate family member: the student may decide whether to apply the ten point leniency to visiting the loved one prior to death, being with family immediately following the death or attending a funeral. Immediate family members will be defined as spouse, children, parent, sibling, grandparent, step-children, step-parents, and step-siblings, parent in-laws, children in-laws, sibling in-laws
2. Hospitalization of self or dependent minor at the time of the exam
3. Birth of the student's child (declared pregnancy)
4. Illness for which a medical provider note states that the student is unable to attend class
5. Military obligation
6. Other catastrophic event beyond the student's control, at the discretion of the instructor

Please note the above exceptions only apply to one exam per event. Students are expected to notify the instructor at least 24 hours prior to the scheduled exam time of anticipated absence, except in the case of an emergency. Failure to notify the instructor will nullify the ten point deduction exception. Documentation of the above events must be submitted to the instructor at the time of the make-up exam. The request to take an exam early because of an anticipated schedule conflict is rarely granted and is not sufficient to avoid the ten-point penalty. If a request to take an exam early is granted by the instructor, the exam can only be administered early on the same day of the scheduled exam time.

AFFECTIVE CLINICAL OBJECTIVES

The following affective objectives are the professional domains that every student must achieve. These are the professional skills and abilities accepted and normal traits that a technologist should have in the clinical setting. The student will be evaluated with the use of the Clinical Evaluation Form.

A. RESPECT FOR PATIENT WELL BEING:

1. Patient Modesty:

Students are expected to observe the patients right to privacy and modesty. This need should be met under all circumstances including transportation to and from the radiology department, within the radiology department and during examinations. Patients should be covered as much as possible at all times. Examination room doors toward public hallways should be closed during all exams; the student should provide a method of restricted access to the room if patient modesty is especially compromised by the nature of the examination. Instructions to the patient should also be given in private to prevent embarrassment to the patient.

During transportation, the patient should be provided with his/her bathrobe if available and practical. If not, the patient should be provided with an alternate form of covering. Slippers should be made available (either the patient's own, or the clinical facility provided). When a patient is transported by wheelchair, a blanket or sheet should be used to cover the patient's legs.

Outpatients should be provided with a patient gown that will provide the maximum coverage for that patient and each exam. Patients should remove only that clothing which is absolutely necessary for performance of the radiographic examination. Shoes and/or socks should be left on for exam except for those in which they would interfere with the performance or cleanliness of the exam. All patients radiographed on a table need to be covered with a draw sheet.

2. Keeping Patient Information Confidential (HIPPA):

The student is expected to observe the rules of confidentiality of patient information. That information which should be kept confidential includes, but is not limited to, examination results, information in the patient's hospital record (chart), personal history, behavior in the clinical setting, and any information obtained from the patient during the exam. The information should be passed on only to those professionals directly involved in the patient's care. Patient information is not to be discussed with coworkers not involved in patient care, other students, student's family and friends, or the patient's family, and doors to all public areas to be closed at all times.

Students should not extend personal favors to family and friends based on their access to patients' radiology results and hospital records. More information is available at the clinical affiliate's web site.

3. Showing Concern for Patient's Comfort

The student is expected to demonstrate concern, in the form of empathy and sympathy for the patient's physical and emotional comfort.

Physical comfort should be achieved by providing support in the form of pillows, sponges, and/or chairs for the patient. Examinations should be performed in a manner that concentrates on patient comfort, not one of ease for the student. Uncomfortable positions should be set up so that the patient remains in position as short a time as possible. The patient should be made as comfortable as possible before the student leaves to check results or examination progress. Patients remaining in the clinical setting for long periods of time should be checked on frequently to assure patient comfort.

The emotional comfort of the patient is equally important, although harder to address. The student should keep in mind that the patient's primary concerns are more than just the outcome or progress of the examination. While it is not the student's responsibility to address all of a patient's emotional problems, he/she should address those most prevalent while in the student's presence. Those areas include, but are not limited to, fear of results, fear of resulting disability, loss of self-esteem, and fear of the unknown.

Fear of the unknown is the easiest for students to dispel, simply by explaining the examination in lay terms and keeping the patient informed of the examination progress. Other fears may be partially dispelled by simply listening to them and providing reassurance without imparting confidential or false information to the patient. Students should encourage communication when appropriate by asking questions and conversing with the patient. The patient's need for self-esteem should be met by allowing the patient to do as much as possible for him/herself without violating hospital policies. The student will need to use judgment in determining what the patient should be allowed to do, but should keep in mind that patients are not all invalids.

B. PROPER PATIENT COMMUNICATION:

1. Addressing Patient Using Proper Titles:

A general attitude of respect for the patient as human being is desired. Part of that includes respect when addressing a person with whom the student is unfamiliar. Upon initial contact, a patient should be approached using proper titles, i.e. Mr., Mrs., Ms., Miss, Reverend, Sister etc., and surname if the patient is older than the student technologist. Upon patient request, or after lengthy contact with the patient, the student may use a method of addressing the patient that is less formal. Children may be addressed on a first name basis in order to promote trust and cooperation. At no time is the use of slang terms, i.e., honey, sweetie, dear etc., to be used. The student will not reach the position of familiarity with the patient that would permit the use of such terms.

2. Introducing Him/Herself To Patient:

In light of the information that is available to the student regarding the patient and his/her condition, it is a common courtesy that the patient should know the name of the individual performing the exam. The student should introduce him/herself to the patient at the time of initial contact. This will also help the patient feel that his/her needs are better being taken care of. The patient may then ask the student technologist directly for assistance. Others present in the room during the exam should also be introduced to the patient.

3. Explaining the Exam in Lay Terms:

Considering the intimate nature of many of the examinations performed, essentially all portions of the examination should be explained to the patient. Judgment must be used by the student technologist regarding the scope and extent of the explanation based on the exam type, patient comprehension level, and patient age and interest. The complexity of the procedure and the anxiety level of the patient should also be considered. Explanations should always be given regarding the general nature of the exam, any palpation made by the student technologist, and any movements required of the patient. In the interest of time and simplicity, short concise explanations are usually best. However, when indicated by the exam and/or patient, length and in depth explanations should be given. Care must be taken to use language that is consistent with the patient's level of comprehension. Jargon, acronyms, and scientific terms should not be used.

4. Keeping Patient Informed Of Exam Progress:

The patient should know the reason for any apparent delay in the exam progress. This is inclusive of any time when something is not actively being done for or to the patient. Common waiting times in the waiting area, waiting for a special room, waiting for a radiologist, waiting for images to be created, waiting for the next image in a timed sequence, waiting for a reading, waiting for paperwork etc. should be explained to the patient. These simple explanations can help to alleviate the patient's fears and anxieties, thereby affecting that patient's opinion of the student, exam, and clinical setting.

C. PROPER PROFESSIONAL RESPECT:

Professional respect should be extended to all persons encountered in the clinical setting.

1. Radiologists:

The student should recognize the relationship that exists between the student technologist and the radiologist. The radiologist is highly trained in the area of interpretation of radiographs, while being minimally trained in their production. The student, on the other hand, is in the process of being highly trained in the area of production and only minimally in the area of interpretation. Therefore, one cannot exist without other. It is imperative that each acknowledge the other's area of expertise.

Respect for the radiologist will be displayed by:

- a. Introducing the radiologist to the patient in any exam in which the two come in contact.
- b. Referring to the radiologist using proper title and surname.
- c. Not questioning the radiologist's instructions regarding a specific examination. Clarification of instructions is appropriate and encouraged.
- d. Not questioning the radiologist's interpretation of an image in a public way. The student's base of knowledge does not justify that disagreement.
- e. When appropriate, questioning the radiologist about films, pathology seen, reasons for requiring given projections and film quality, etc. Questions, which enrich the student's understanding of imaging and the radiologist's requirements, are appropriate and encouraged. Questions that in any way "question" the radiologist's competence is unacceptable, questions should be asked on an individual basis and when time allows (not during an exam).
- f. Being supportive of the radiologist's role and competence in public. Privileged information obtained in the hospital setting must be kept in the utmost confidentiality. Personal opinions of the radiologists must be kept as such – personal, not public.

2. Staff Technologists:

Staff technologists should be viewed by student technologists as providers of information, examples to be followed, and authorities in the field. The student should recognize that radiography is an art; not an exact science; several different methods may achieve the same end. The classroom teaches one way, working technologists develop variations of this way. Student should not expect staff technologist to be the ultimate source of information, as recall of specifics may diminish after the formal education process has ended. Students should keep in mind that the primary goal for the staff technologist is to get the job done, not necessarily to teach the student how to do it.

Respect for the staff technologist is displayed by:

- a. Accepting the technologist decisions regarding positioning, procedure, and technique. This should be done without question in light of the education and experience of the staff technologist.

- b. Questioning the staff technologist's decision in private and in the atmosphere of increasing knowledge, not passing judgment on the competence of the staff technologist.
- c. Recognizing that each staff technologist may have individualized any given procedure while keeping in mind the method that was taught to the student by the program faculty.
- d. Being supportive of the staff technologist's role and competence in public. Privileged information contained in the hospital setting must be kept in the utmost confidentiality. Personal opinions of the staff technologists must be kept as such-personal, not public.

3. Program Faculty:

The student should view the program faculty as mentors and role models. The relationship between faculty and student must be professional. Respect for the faculty is a fundamental assumption without which learning is compromised.

Respect for faculty will be displayed by:

- a. Following instructions given by faculty.
- b. Questioning of instructions and decisions is not discouraged. However, questions must be asked professionally and respectfully at the soonest appropriate time following the examination in question. Students should ask questions with the intent of gaining further knowledge and insight and not with the intent of questioning competency. The authority of the program faculty should be recognized without ignoring the student's right to disagree. The student should understand that acceptance is required while personal agreement with the faculty's philosophy is not.
- c. Bringing discrepancies in positioning, procedure, and technique to the faculty's attention so that an explanation may be offered.
- d. Recognizing the faculty member's role as liaison with other parties involved in the educational process, i.e., imaging personnel, hospital personnel, and college staff and faculty.
- e. Being supportive of the program faculty's role and competence in public. Privileged information obtained in the hospital setting must be kept in the utmost confidentiality. Personal opinions of the program faculty must be kept as such-personal, not public.

4. Staff Physicians:

The relationship between student and physician is similar to that between student and radiologist in that certain level of respect is assumed. The student should recognize the physician's special area of expertise and should acknowledge their role in the care of the patient. Generally speaking, the physician will be the coordinator of the care of that patient, and may be the only person who is aware of all facets of the patient's condition.

5. Clinical Affiliate Staff:

The student's relationship with the clinical affiliate staff should be reflective of an awareness of their given areas of expertise. An atmosphere of cooperation, not competition, is essential in order to facilitate the best possible care for the patient. The student should remember that clinical affiliate and its staff are providing a service to the student by allowing the clinical phase of training to take place there.

D. COOPERATION WITH THE CLINICAL SITE STAFF:

1. Accepting Constructive Feedback:

Students will inevitably be the recipient of positive reinforcement and professional feedback from faculty, staff technologists, and radiologists. It is vital to the education progress of the student the criticism be viewed as an attempt toward improvement in the student's competence or professional growth. What is seen as criticism by the student may actually be only a difference of opinion, a difference in instruction, or a demonstration of the "art" of imaging expressed as an individualized method. The student should receive the criticism without argument. A defensive attitude is expected initially, but should be displayed as little as possible until the student has taken the time to examine the circumstances more fully. The student should attempt to understand the criticism and should further study images, procedure books, reference books, or ask faculty members to help with an explanation.

At no time is it acceptable for a student to disagree with criticism in front of a patient. It is also unacceptable for criticism to be given in front a patient, and faculty members should be aware of any such instances.

In the event that criticism is given in a nonconstructive manner, the Clinical Instructor should be notified as soon as possible in order to rectify the situation. Time is important in this instance as details tend to be distorted/fade proportionately with increases in time.

2. Observing Rules and Regulations:

Students in clinical training must observe the rules and regulations of the clinical affiliate. Areas of concern include, but are not limited to, the following:

- a. Parking
- b. Transportation of patients

- c. Dress Code
- d. Examination procedures
- e. Work assignments
- f. Use of facilities
- g. Use and care of equipment
- h. Film quality criteria

3. Asking Appropriate Questions of Staff:

In order to enhance the clinical learning experience, the student should attempt to learn as much as possible about the clinical affiliate. Students will be taught in the classroom to perform each examination according to a given set of criteria. Individual technologists may perform that examination differently according to patient condition, equipment available, personal preference, or variations in training. The student should inquire the technologists regarding the variance at an appropriate time and place. The student should observe and inquire staff technologist's actions regarding an exceptionally difficult or unusual patient in order to have a reference in the instance that the student encounters a similar patient or circumstance.

4. Offering Assistance to Staff:

An atmosphere of cooperation among staff and student technologists is essential to the operation of the clinical affiliate's imaging department. A student in clinical training must keep him/herself occupied as much as possible in order to intensify learning. It is especially recommended for students to assist with examinations that are beyond their didactic educational level. This will enhance classroom learning in that subject area when it is approached. In these circumstances it is important for the student not to participate with a closed mind. The student should be inquisitive about positioning, centering, central ray angulation, technique, and anatomy, as well as becoming familiar with departmental policy regarding the examination. These actions will increase the student's rate of learning as well as create a positive attitude in the technologist regarding that particular student.

5. Responsible Assignments:

Acceptable behavior in this area will be demonstrated by the following:

- a. Attempting to perform routine exams (the student has demonstrated competency) on a difficult patient.
- b. Attempting examinations for which the student has received classroom instruction, but not much clinical practice. The student should attempt to perform the exam as completely as possible with the technologist assisting when necessary rather than always watching what the staff technologist does.

- c. Assisting the staff technologist with exams that are beyond the scope of classroom learning in the interest of learning about the exam before it is covered didactically.

E. DEPENDABILITY:

1. Following Instruction:

The student will follow instructions given by staff technologists and faculty as completely and accurately as possible. If the instructions as given are unclear to the student, it is his/her responsibility to obtain clarification BEFORE attempting to carry them out. Asking in advance is always better than making an error or guessing as to the intended meaning. The student should not be reprimanded or made fun of for asking clarifying questions. Any instances of this happening should be reported to the Clinical Instructor immediately.

2. Meeting Clinical Assignments as Scheduled:

Students are expected to meet all clinical assignments unless an emergency arises of illness would cause the student to perform at a substandard level. Although the clinical affiliate does not depend on students for its day-to-day functioning, the students are an important part of the department. Circumstances arise where the assistance of a student would provide smoother and more pleasant operation. Failure of the student to meet the scheduled clinical hours creates feelings of mistrust and unreliability in the technologist's view of the students. Dependability is one of the most admired and expected attributes of any health care professional or student. Failure to meet expectations in this area carries over into other areas of the technologists' view of the student.

3. Completing Assignments:

Students should complete patient examination from retrieving patient through completing paperwork on computer and PACS. The student is responsible for retrieving and changing the patient, performing exam, producing an image(s), completing paperwork, discharging or returning patient, and cleaning the imaging room and supplies used in performance of an exam. Assistance with any part of these is acceptable as long as it is on a voluntary basis and does not result from the failure of the student to perform all duties.

Additionally, a student should complete any examination with which he/she is involved at the end of the scheduled clinical hours unless the involvement is so minor that student's leaving will not require replacement or in any way affect the performance of the exam.

F. ADHERENCE TO PROGRAM DRESS CODE BY:

1. Wearing Appropriate Uniform:

The required student uniform is described in Policy #5.

2. Observing Personal Hygiene:

Students are expected to observe normal and customary rules of hygiene. Hair should be neat, clean and secured so as not to interfere with the exam. Body should be bathed daily to prevent spreading of germs. Hands and fingernails should be kept scrupulously clean throughout the clinical time since hands are the most frequent cause and spread of disease. In addition, personal cosmetic habits should be such that they are not offensive to the patient. Females should wear makeup, perfume, fingernail polish, and jewelry at a minimum subdued level, as fragrances are especially offensive to the ill. Bright colors (on nails and face) are usually offensive to the ill and are out of place in the clinical affiliates' facility. Jewelry can harm patients (especially rings) or can be potentially harmful to the student, i.e., chains that can be easily grasped.

G. SEEKING ASSISTANCE WHEN NECESSARY:

1. Proper Patient Care in Exam:

The student should use sound judgment when seeking help with difficult aspects of an examination. If the student is unaware of the required skills in order to care for a given piece of equipment, assistance should be sought from clinical affiliate staff, technologist or faculty member. When transporting a patient the student should be certain which apparatus may be discontinued while being imaged and which must accompany the patient before disconnecting anything. Once in the imaging suite, the student is responsible for the operation of the apparatus and should seek assistance from a staff technologist or faculty member should any problems arise. When it comes to patient care, caution is preferred over negligence; therefore the student should not hesitate to ask for help. As the student progresses in his/her education a decrease in assistance should be obtained. Some areas of patient care where assistance may be needed are:

Isolation policies Nasogastric tubes and suction

IV operations Oxygen administration

Chest tube and suction Catheter Care

Patient care should also include other items beyond care of equipment. Several aspects of patient care have been discussed in sections A and B. The student should also be concerned about the personal cleanliness of the patient if the patient is unable to perform the task for themselves. A patient should never be returned to the floor in an unclean state. Patients' that are incontinent or without bowel control should be cleaned before leaving the imaging suite or in the patient's room before the student leaves. Outpatients as well as inpatients should be provided with necessary items to clean themselves of contrast media and should be assisted if necessary.

2. Technical Aspects of Exam:

Students should seek assistance with an exam whenever there is doubt about its performance. This includes areas of technique, positioning, central ray angulation, nature of exam, department routine and difficult patients. The student is encouraged to try to use his/her knowledge and common sense to reason out the problem, but should not hesitate to ask for help when necessary. As in all circumstances, the assistance should be sought at the proper time and in the proper manner and never in front of a patient. As the students' education progresses, less assistance should be necessary. Students are encouraged to commit techniques to memory as soon as possible.

H. CRITICAL THINKING:

a. The Ability to Adapt To New Situations:

As the student progresses, it should be easier to adapt each exam to the patient, clinical affiliate and circumstances surrounding the exam. The student should be able to adapt the routine method of performing the exam in the areas of positioning, central ray angulation, image position, focal image distance, image-screen-grid combinations, technique and patient mobility. The student should always attempt to perform the exam in the way that is easiest and least harmful for the patient.

2. Instilling Confidence in Patients:

The student should demonstrate to the patient that he/she is capable of doing the examination and is confident in him/her. This may be demonstrated by an even, calm tone of voice, steady hands, organization, efficiency, conversation, thorough explanations, acknowledgment of questions, providing answers when possible, and by seeking assistance, if necessary, without the patient's knowledge. The patient should respond to the student in a manner that suggests trust and confidence. The patient may demonstrate this by conversing easily, relating symptoms with calm, even tone of voice, and responding to the student's instructions properly.

3. Student Confidence:

The student should keep in mind that while he/she's enrolled in the program, the educational process is still taking place. While the student's body of knowledge is appreciated, it is also recognized that there is always more to learn. Students should not pretend that they know how to do an exam of which they are not unsure; it is never acceptable to perform an exam without being reasonably sure of the outcome of one's actions related to patient care and image quality. The student should use his/her knowledge and reasoning and should share this with other students and technologists in an atmosphere of cooperation and assistance, not superiority. The outwards signs of the overconfidence will be in the student's tone of voice, facial expression, and reactions to the other person's acceptance of the information.

4. Basing Decisions on Clear Thought:

Where quick concise decisions are necessary, the student should develop the ability to decide quickly based on knowledge and circumstances surrounding the examination. Such instances may range from the child patient to the disoriented older patient to the uncooperative emergency patient. The student should, as much as possible, remain calm and self-confident and perform the exam as routinely and efficiently as possible. The student should not cease to function in the capacity of student technologist and revert to the role of observer. Experience will greatly help the student's ability to achieve this. Therefore the student should observe and assist whenever possible with this type of examination.

5. Always Striving For Quality Care and Films:

The student should combine knowledge and reasoning in the performance of the exam in order to ensure quality care and images. In the instance that an image is less than optimal, the student should evaluate the image quality and patient condition in order to determine if a repeat image is indicated. The student should not make this decision entirely on his/her own. Student images should always be reviewed by a staff technologist, faculty member, or radiologist. If a repeat is needed, the student should perform this willingly and should not give the person requesting the repeat a difficult time. Opposition to the decision should not be expressed verbally or nonverbally; requesting an explanation of the reason for the repeat is acceptable. The student should be certain of how to correct the error and **must be accompanied by a technologist (direct supervision) for the repeat image**. The student should strive for the perfect image, accept the good image, and be willing to repeat the poor image if necessary.

Performance Evaluation

PROCESS OF DEMONSTRATING CLINICAL COMPETENCY

The Radiologic Science Program is a competency based program in that the student **MUST** complete the required clinical objectives and **MUST** demonstrate the required level of clinical competence to remain in the program, and ultimately graduate. Competency based clinical education is a progressive approach to the development and eventual success of the student in the performance of imaging procedures. The following is an outline of the sequential process:

A. CLINICAL COMPETENCY EVALUATION:

1. The student will first receive didactic instruction for a particular exam
2. The faculty will give laboratory demonstration of each projection for that exam
3. The student will successfully complete a lab test
4. The student can now perform exams with **direct supervision**

5. The student will successfully complete a specific minimum number of exams that are recorded on their Procedure List
6. After successful completion of the specific minimum number of exams for that procedure, the student will, when ready for competency testing, ask their supervising technologist to evaluate them for clinical competency on a patient. Faculty and/or technologist tend not to decide when the student is ready for testing.

B. CLINICAL COMPETENCY TESTING PROCEDURE

The student will follow these steps when requesting a clinical competency test:

1. Prior to the start of an exam, inform the instructor/technologist (evaluator) that they wish to be tested on the exam.
2. The student will provide the evaluator with the appropriate competency grading/evaluation form.
3. The student will perform the exam with the evaluator present for all phases of the exam. **Once the patient has been brought to the imaging suite or the exam has started, the student may not cancel the evaluation.** Special circumstances will be made (i.e. handicapped etc.).
4. The evaluator will grade the student's performance based on established guidelines printed on the form. The form contents, grading criteria and required projections may not be changed, altered or deleted. All items on the form must be complete and evaluated.
5. A Clinical Competency Evaluation Form must be completed for every competency exam attempted.
6. **The evaluator must evaluate the student's performance by observing all aspects of the exam, not just by critique of the image(s).**

The student must receive a grade of 85% or better in order to pass a clinical competency evaluation. The student will **Automatically Fail** for not properly identifying the patient, not obtaining the pregnancy status of childbearing age women, not shielding and compromising patient safety, no visible or correct markers, not insuring physician order is correct. A student automatically failing a competency test will receive a grade of 74%; and, the actual percentage score for all other failures. The student will be **reevaluated** for that procedure following remedial training based on feedback from the evaluator and reason(s) for the failure.

C. THE REMEDIAL TRAINING PROCESS:

1. Discussion of the areas requiring improvement.
2. Review of didactic material for the exam if necessary.
3. Repeat lab of the exam, lab test, or clinical exam evaluation if necessary.
4. Student is able to attempt second clinical competency evaluation. Repeat competency exam with a grade of 85% or better.
5. If the student fails the competency exam on their second attempt, they will receive a grade of "0". The student will then repeat the category: the above remedial training procedure, repeat required minimum number of exams under direct supervision of a technologist if necessary, and student is able to attempt a third clinical competency evaluation. A third failure will require academic counseling with possible dismissal from the program.

From the list of exams provided on the competency form, the student must have completed the number of exams listed by the end of each semester due date listed. The student may complete a competency test on any exam in any semester, provided they have first successfully completed the required lab test and required minimum number of exams under direct supervision of a technologist. Failure to meet the clinical competency criteria at the end of a marking period will result in REDUCTION of the CLINICAL LETTER GRADE BY TWO-LETTER GRADES (i.e., A to B+, etc.).

Failure to meet the total minimum number of clinical competencies by the end of the end of summer session II will result in dismissal from the program.

CLINICAL GRADE

The clinical grade is an average derived from the grades of the competency exams, clinical assessment and in the sixth semester, a written assignment regarding Evening Weekday Rotation. A student must pass their clinical education course with a grade of 77% (C+) or better (76.99% and below is failing) and maintain a GPA of 2.5 or better for all course work.

CLINICAL PROCEDURE LIST

During **FILM CRITIQUE SESSIONS** in the department, the student will review their cases with school faculty to determine if the performance meets acceptable criteria. If the exam is satisfactory, the student may count the procedure on the competency form in the clinical competency process. The student is only allowed to count exams shown and accepted during film critique.

The student must comply with the following directions and criteria in order to count procedures for the clinical competency process.

1. The student must have successfully completed a lab test for the clinical exam.
2. The student is reminded that even though a study may be acceptable enough for the clinical affiliate, this does not automatically mean that the study will meet the acceptable criteria for film critique and counting towards competency.
3. The student must perform **ALL** aspects of the case, to include positioning and selecting proper technique, with minimal help from the supervising technologist correcting the performance.
4. The student must have the original hard-copy identification card (when applicable) present with history, technique and signature of the technologist on back.
5. Exams cannot be counted if:
 - a. Any views were repeated other than for equipment malfunctions
 - b. There is no evidence of proper collimation, whenever practical, on all four sides
 - c. There are no visually distinguishable or incorrect letter markers
 - d. There is no evidence of proper gonad shielding whenever appropriate
 - e. Technical factors are not acceptable for the study (within "S" number range)
6. The student must have used the smallest image receptor practical for the study
7. The patient ID blocker and markers must be out of the anatomy on all views of the study.
8. Left and right markers must be placed appropriately.
9. All accessory markers, when appropriate, must be clearly visible and out of the anatomy.
10. All required anatomical structures, as stated in *Merrill's* and/or clinical affiliate procedure manual for each view, must be present.
11. The medical record number of the patient will be written down under the appropriate exam on the student's procedure list and initialed by the instructor. The instructor will

sign and date the ID card and then turn the cards in to the Program Director so that the student's master list may be updated. The student is responsible for placing their name on the card. Cards submitted without the students name will not be counted.

12. When there is difficulty in obtaining cases for a particular exam, the student may elect to perform a clinical competency even though they have not completed the required minimum number of clinical exams. The student may initiate this by meeting the following criteria:

- a. The student must be in their second year (last two semesters), as experience is a consideration to these alternative methods.
- b. There must be at least one (1) case counted in that exam category.
- c. The student must complete a laboratory or lab test evaluation with program faculty prior to clinical competency.
- d. The clinical competency must occur within one month of the laboratory/guided practice evaluation.

13. The Program Director and Clinical Instructor will make the final decision as to the student's use of this alternative method. This method is not meant to be the normal process for clinical competency evaluation. The purpose of this method is to allow for flexibility when volumes do not allow for opportunities (i.e. headwork).

14. The student must realize they are required to maintain a passing grade of 85% for clinical competency evaluation.

FLUOROSCOPY POLICY

Due to the nature of the exams and the amount of radiation involved, to insure patient safety, the following policy must be observed for all fluoroscopic exams:

1. During the first year, all students must have a qualified technologist present in the radiographic room for the length of the exam.
2. During the second year of training, all students who have satisfactorily completed a competency exam for the procedure must have a technologist either in or outside the radiographic room (indirect supervision) at the control panel for the length of the exam.

3. If a second year student has not satisfactorily completed a competency for the procedure, there must be a technologist present in (direct supervision) the radiographic room for the length of the exam.
4. Regardless of where the student is in their training, a technologist must be present in the radiographic room:
 - a. Whenever a student inserts the tip for a barium enema
 - b. Whenever any special or invasive exam is being perform

Instructor/Clinical Affiliate Evaluations

The instructor, clinical affiliate radiologic technologist, Program Director, will complete clinical evaluations at the end of each semester. Student absences are documented. The student and the clinical instructor will meet privately and discuss evaluations. The evaluation will be signed by the student and the reviewer. The student may state disagreement with the evaluation, either verbally, or in writing, and then sign the form. Signing the evaluation indicates that it has been read.

Radiation Protection and Safety

Introduction

No amount of radiation exposure is safe and therefore, must be respected. As such, students must be cognizant of sound radiation protection practices for themselves, their patients, and coworkers. Students cannot participate in procedures using unsafe protection practices. The ALARA (As Low As Reasonably Achievable) principle will be used for radiation protection of the student and the patient.

Compliance

The Vermont Technical College Radiologic Sciences Program recognizes and abides by the Nuclear Regulatory Commission's *10 CFR Part 20 Standards for Protection Against Radiation* including the following:

- Subpart A: General Provisions
- Subpart C: Occupational Dose Limits
- Subpart D: Radiation Dose Limits for Individual Members of the Public
- Subpart F: Surveys and Monitoring
- Subpart L: Records

NRC *10 CFR Part 20* can be found on the Internet at the following address:

www.nrc.gov/NRC/CFR/PART020/index.html

In addition, the program abides by the State of Vermont, New Hampshire and New York Radiation Protection Regulations. Copies of these regulations are in the Program Director's office. It should be noted that the state regulations are taken (generally word for word) from the NRC *10 CFR Part 20*.

Reference to NCRP #116 is also used. A copy can be found in the Program Director's office.

The program and clinical affiliates will provide sound educational theory and proper protection devices to maintain safety of the students, staff, and patients.

- Radiation safety will be discussed and demonstrated during Radiographic Procedures courses and lab. During the professional semesters, radiation protection will be an ongoing evaluated activity in the clinical coursework, and discussed at length in the Radiologic Science courses and Radiation Protection.
- Clinical affiliates will provide radiation safety devices such as aprons, gloves, thyroid shields, and whole body shielding devices appropriate for the circumstance.
- Clinical affiliates will assure that clinical radiographic equipment is in compliance with state and federal safety regulations.

Radiation Monitoring and Limits

All faculty members and students in clinical education are provided film badges by the College. The following points should be noted about badge use:

- Film badges must be worn at the clinical affiliates, especially in radiation areas.
- Film badges are not to be worn at any other time. Badges are not to be worn outside of clinical education during employment involving radiation exposure.
- Film badges are to worn at the collar, outside the lead apron, to monitor exposure to sensitive organs such as the thyroid and lens of the eye.
- Students that declare themselves pregnant will be provided an additional badge to be worn inside the apron at waist level. Refer to Policy # 6.

Film badges will be changes each month. The Program Director will collect the film badges and send them in to be processed. Resultant reports will be disseminated in the following manner:

- The original report is kept on permanent file with the Program Director
- A copy of the report is given to the Clinical Coordinator. After review, the report is forwarded to the clinical affiliates' physicist for evaluation.
- A copy of the report minus social security numbers and birth dates (for privacy) is posted in the Radiologic Sciences lab. It is the student's responsibility to review this report each month.

- Unusual reports or high exposures will be discussed by the Program Director, Clinical Instructor, and affiliate physicist. The student will be counseled about the report and provided review of safety practices and suggestions for more prudent radiation safety.
- In accordance with the above radiation policies, students (over the age of eighteen) may receive a dose of 5000 mRem/year as recorded from the film badge. To assure dose limits are not exceeded, the following limits have been set by the program:
 - a. Counseling of the student if a monthly report exceeds 200 mRem.
 - b. Removal of the student from potential radiation exposure duties for a one month period for each monthly report that exceeds 400 mRem. This clinical activity will be made up at a later date.
 - c. Pregnant persons cannot exceed the 500 mRem per year (50 mRem per month) dose recommendation based on the embryo as an “involuntary visitor.” If necessary and approved by the student, clinical supervisors may rotate the student out of fluoroscopy and portable areas.
 - d. Students shall not exceed state and federal guidelines for radiation exposure.
 - e. Students should make the program aware of outside work that may expose them to radiation so reciprocity for exchanging badge information can be accomplished.

Student Conduct

The following unsafe radiation practices are grounds for discipline up to and including dismissal from the program. Examples of unsafe radiation practices include but are not limited to:

- Taking exposures intentionally or unintentionally on fellow students or others. All exposures of humans are to be taken for a medically valid reason and through proper channels in the clinical affiliate (requisition with orders from a physician).
- Attempting any procedure under indirect supervision without fulfilling indirect supervision requirements.
- Repeating films without direct supervision of a registered technologist.
- Participating in portable radiography, fluoroscopy holding patients, or any other activity that will cause the student to receive radiation exposure without wearing proper protective apparel.
- Being in a radiographic or fluoroscopic room for no good reason during exposures.
- Repeating images by not properly measuring patients, or not using techniques charts and proper AEC techniques.

- Manually holding patients instead of using available mechanical holding devices.
- No or improper wearing of film badges when in the clinical area.
- Tampering with film badges or radiation reports.

Student Pregnancy Policy

The Supreme Court has ruled that all fetal protection policies constitute illegal sex discrimination, unless the pregnancy “actually interferes with the employee’s ability to perform the job”. In terms of your student status, Vermont Technical College Radiologic Sciences Program will not discriminate against pregnant students.

The curriculum will provide awareness of potential dangers to the unborn fetus in terms of radiation exposure, communicable diseases in a hospital environment, and the physical requirements of training. You will receive this information at the start of the first fall semester (junior year) within the program. Published NRC regulations regarding pregnant students are available for viewing in the Program Director’s office or the web at www.nrc.gov. This can be looked up in the library.

The following procedure will be used by the Radiologic Sciences Program:

- All incoming students will be given this policy and be requested to document possession of the policy, reading it and understanding it.
- All incoming students will be given information in the curriculum about radiation safety, personal protection procedures for communicable diseases, and correct lifting and body mechanics.
- If a student becomes pregnant during training, to protect her right of privacy, she may elect to:
 - a. declare her pregnancy
 - b. not declare her pregnancy
 - c. undeclare her pregnancy

If the woman chooses to voluntarily inform program officials of her pregnancy, it must be in writing and indicate the expected date of confinement (delivery). In the absence of this voluntary, written disclosure, a student cannot be considered pregnant. Once a pregnancy is declared, the program in consultation with Radiation Physicist at the Clinical Affiliates’ will monitor the student so that the fetus does not receive more than 500 mrem during the pregnancy as required by current regulations. As required by Vermont regulations, declared pregnant students will be issued a second film badge to be worn at the waist level, below any protective clothing. The student’s routine film badge will continue to be worn at collar level outside the apron. Students with employment must bring monthly outside film badge reports to the Program Director for dose compilation.

As with illness or other circumstances, time missed from clinical and didactic course-work must be completed. The program will provide the following options for doing so:

- Continuing the educational program without modification or interruption
- The Program Director, working in concert with the Clinical Coordinator, Clinical Instructor, the clinical site's supervisor, and under the student's discretion, can include modification in clinical assignments.
- Leave of absence from the program.

In leave of absence cases, re-entry into the program will follow program attendance policy.

References:

Nuclear Regulatory Commission CFR10

Pregnancy-Based Radiation Protection Policies. JRCERT Handbook

Infectious Diseases

During the course of your training and later professional career, there is the possibility of your exposure to communicable diseases. In addition to learning and practicing the concepts of "Universal Precautions" it is required that students and staff acquire the Hepatitis B vaccination and other required inoculations from their family physician or community health department. **A tuberculin skin test is required yearly by Clinical Affiliates. The TB skin test may be obtained from your personal physician or community health center. At some Clinical Affiliates, a flu shoot or wearing a mask will be required during flu season.**

Clinical Affiliate Policies

All students will verify that they have reviewed and understand specific clinical affiliate policies contained in electronic manuals at the clinical affiliates. Assigned by the Clinical Coordinator, these policies will include but not be limited to: standards of practice, patient care, infection control, physical safety, radiation safety, departmental administration, radiology routines, parking, smoking, and security. These policies will be covered in detail at the start of your clinical rotations.

Professional Organizations/Committees

As part of a student's professional training, it is strongly recommended to maintain membership in the Vermont Society of Radiologic Technologists. Membership in this organization will provide educational opportunities, professional contacts for future employment, and a political voice directing the future of technologists in the state as well as the nation. Time off from clinical training will be given to students attending or participating in state wide competitions and meetings. Membership is required for these activities.

Students are encouraged (but not required) to join the American Society of Radiologic Technologists.

Advanced/Transfer Standing

Per JRCERT and ARRT guidelines, students on an individual basis may apply for advanced standing or to transfer to the Radiologic Sciences Program. After careful review of past training and transcripts, student would be placed in curriculum at a point determined by the Program Director in conjunction with the registrar's office. The student would be required to satisfactorily complete all subsequent requirements to complete the program.

Note: given the uniqueness of each program's delivery of curriculum, it is difficult for a student to acquire advance standing.

Clinical Site Selection

Students will be assigned to a clinical affiliate by the Clinical Instructor. Each student will be afforded an opportunity to gain clinical experience from each clinical affiliate. If student attrition occurs during a semester, students may be required to alter their rotation to optimize the learning environment by maintaining a balanced student rotation.

Per our affiliation agreements with the clinical sites, a clinical affiliate may refuse to accept or continue a student after a negative background check, or for any reason; professional or scholastic. If this situation occurs, the student will be dismissed from the program, because of the inability to progress in the clinical training. Clinical training is a requirement for program completion.

Satisfactory Behavior Examples

- Demonstrates respect for the dignity of self, patient, family, and professions in all settings through actions, attitude, and appearance
- Transfers previous and present knowledge of the objectives to the experience (transformational learning)
- Initiates and maintains self-direction
- Applies theory, principles, and skills at expected level
- Demonstrates progressive semester level skill development
- Recognizes own limitations
- Seeks guidance when needed

- Maintains confidentiality in the radiologic technologist/patient relationship
- Accepts responsibility for own actions
- Demonstrates independent functioning in a progressive manner
- Functions as a member of the healthcare team

Discipline

Students will abide by the policies of Vermont Technical College as set forth in the student conduct policy in the Student Handbook. In addition to these policies, students will conduct themselves in a professional manner while at the clinical affiliates. Each student must have a thorough understanding of Vermont technical college and clinical affiliates policies and an awareness of what is expected in that area. The purpose of this policy is to provide for student counseling and disciplinary action. Application of these guidelines must be consistent so that all students receive similar treatment for similar offenses.

Positive Discipline: Positive discipline means that the supervisor's efforts shall be directed toward developing the student aiding him/her to achieve and maintain the status of a competent student. Activities cited in this provision are not intended to be all inclusive, and are used here as examples only. Violations may lead to immediate dismissal from the program. Many of the violations listed below specifically refer to clinical training while at the clinical affiliate.

- Habitual tardiness or absenteeism
- Failure to call Clinical Coordinator in timely manner if absent or late
- Interfering or refusing to cooperate with security personnel
- Gambling on Vermont technical college or clinical affiliate premises
- Any negligent or careless act which results or might have resulted in property damage, or personal injury to himself/herself or another person
- Wasting time, material, or supplies at the clinical affiliate
- Contributing to unsanitary conditions or poor housekeeping
- Failure to properly and specifically document situations when it is professionally responsible to do so
- Violating a safety rule of safety practice or failure to file an incident report
- Marginal or poor clinical performance due to attitude, physical condition or lack of interest
- The display of traits, actions, or attitudes contrary to Vermont technical college and clinical affiliate principles
- Failure to work effectively and/or in harmony with supervision and/or coworkers
- Posting, altering, or removing any printed or pictorial matter on bulletin boards or clinical affiliate property

- Threatening, intimidating, coercing, or interfering with fellow students or employees on the premises
- Smoking in areas where smoking is prohibited
- Leaving the clinical affiliate without permission of the Clinical Coordinator and/or Clinical Instructor or departmental supervisor
- Failure to follow clinical affiliate instructions, verbal or written
- Vending, soliciting, or collecting contributions for any purpose unless authorized by Administration
- Distributing written or printed matter of any description on the premises unless approved by Administration
- Disorderly conduct, provoking, or instigating a fight on clinical affiliate premises
- Reporting to clinical under the influence of alcohol or drugs
- Insubordination
- Disregard for clinical affiliate policies
- Failure to stay current on immunizations, TB tests, and CPR
- Failure to follow student policies per this manual

Positive discipline will be followed, applying the following steps:

- Oral warning (documented)
- Written warning
- Dismissal from the program

Note:

Depending upon the severity of the infraction, any step or steps may be eliminated. The student is not to assume that each step in the positive discipline approach will be applied in order or applied at all if the infraction is considered grave.

Immediate Dismissal:

Students are to use their common sense and honesty to avoid discipline. The listing below is not intended to be all-inclusive, but is illustrative of conduct which may result in immediate dismissal from the program.

- Concealment of a mistake which could affect the safety of himself/herself or another person
- Unauthorized use or possession, within the College, the clinical affiliate or on its grounds, of narcotics, drugs, alcohol or substances that alter mental and/or physical condition so as to impair or impede normal function
- Immoral conduct

- Continual failure to engage technologist(s)
- Sleeping during clinical training
- Intentional falsification or omission of information on any clinical affiliate record
- Unauthorized removal of, or conversion to personal use of any clinical affiliate property, or the property of a patient, physician, vendor, visitor, student, or employee
- Unauthorized possession of firearms or explosives on premises
- Any willful act injurious to the clinical affiliate or its reputation
- Violation of patient confidentiality, including but not limited to, accessing patient information without a need to know

Students that disagree with a disciplinary action may appeal via the grievance procedure in college student handbook.

Please note - In addition to the **“Have you ever been convicted of a misdemeanor or felony?”** question, the ARRT has added the following question to their application for certification: **“Have you ever been subjected to a sanction as a result of a violation of an academic honor code, or suspended or dismissed by an educational program that you attended in order to meet ARRT certification requirements?”**. If you answer yes to either of these questions, you will have to address them in writing to the ARRT before you can meet their requirements for certification.

Dismissal/Reentry

Dismissal from the program can occur from **grading** or **discipline** issues.

- Once the student is enrolled in Radiologic Sciences courses, the courses are considered **professional**. A student who receives a failing grade (below a “C” – 74.9 or lower) in any Radiologic Sciences course will be dismissed from the program.
- An unexcused absence is not showing up at the clinical affiliate and failing to notify the Clinical Instructor **BEFORE** the scheduled time. A message can be left on voice mail if a Clinical Instructor cannot be reached or an email. **Failure to notify the Clinical Instructor will result in an unexcused absence that will remain on the student’s record throughout the program.**
 - a. First unexcused absence will result in a verbal counseling (documented).
 - b. Second unexcused absence will result in a written warning.
 - c. Third unexcused absence will result in dismissal from the program.
- Positive discipline will be followed, applying the following steps:
 - a. Oral warning (documented)
 - b. Written warning
 - c. Dismissal from the program

- Note however, depending upon the severity of the infraction, any step or steps may be eliminated. The student is not to assume that each step in the positive discipline approach will be applied in order or applied at all if the infraction is considered grave. Students are to use their common sense and honesty to avoid dismissal.

Program Re-entry

Pregnancy

Students that have left the program due to pregnancy are free to return to the program within one year of departure.

Voluntary Withdrawal

Students who have voluntarily withdrawn and wish to reenter the program must reapply and be accepted through the normal application process.

Academic Dismissal (1st Year including summer)

Students that have been dismissed from the program in their 1st year due to academic failure in didactic or clinical education must reapply and be accepted into the program through the normal application process.

Academic Dismissal (2nd year)

2nd year students that are dismissed may reapply within one calendar and be considered for conditional reacceptance into the program.

- A failed course(s) must be taken at their next sequential offering.
- Students that have not repeated failed course(s) within one calendar year must reapply and be accepted into the program through the normal application process.

Clinical Failure due to Unsafe Practice

The student is not eligible for readmission to the program

Academic Progression

Radiologic Science Grading System

The Grading System is as follows:

Grade	Quality Points
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A = 95 – 100	4.0
A- = 90 – 94.9	3.7
B+ = 87 – 89.9	3.3
B = 84 – 86.9	3.0
B- = 80 – 83.9	2.7
C+ = 77 – 79.9	2.3
C = 75 – 76.9 74.9 or below = failure to progress in Radiologic Science Program	2.0 Minimum passing grade
C- = 70 – 74.9	1.7
D+ = 67 – 69.9	1.3
D = 64 – 66.9	1.0
D- = 60 – 63.9	0.7
F = Below 60	0.0

Students must receive a grade of C (77) or higher in all RAD courses as well as BIO and PSY courses, in order to progress in the program. If a Radiologic Science student in the last semester of his/her program does not achieve these grades, he/she will not be allowed to graduate.

Grades lower than the required 77% will be reflected on the transcript with the corresponding grade. Any grade below 76.99%; students will not continue to progress or graduate from Vermont Technical College's Radiologic Sciences program.

Program Re-entry

Pregnancy

Students that have left the program due to pregnancy are free to return to the program within one year of departure.

Voluntary Withdrawal

Students that have voluntarily withdrawn and wish to reenter the program must apply and will be considered on a case by case basis.

Academic Dismissal

Students that have been dismissed from the program in their first year of training due to academic failure in didactic or clinical education must re-apply and be accepted into the program through the normal application process.

- A student that is reinstated must repeat any failed course. Students may repeat required professional coursework only once.
- Should the student receive a failing grade on a second attempt to complete a professional course, the student will be dismissed from the without the possibility of readmission.

Academic Dismissal (Second Year)

Second year students that are dismissed may re-apply within a calendar year and be considered for conditional reacceptance into training.

- The failed course(s) must be taken at their next presentation to continue in the curriculum.
- Students that have not repeated failed courses within the one year time frame must re-apply and be accepted into the program if space is available.
- Reentry into the program and evaluation for remedial coursework will be performed on a case by case basis.

Drug and Alcohol Policy

The Radiologic Sciences Program follows Vermont Technical College's policies found within the Academic Catalog regarding the Drug and Alcohol Policy.

In conjunction with the College policy, due to clinical training, students with the Radiologic Sciences Program must also follow the clinical affiliate's policies with regards to drugs and alcohol. The inability to practice with skill and safety due to current abuse or drugs and/or alcohol; identification of impairment is based on observable, objective, and quantifiable behaviors that suggest an inability of the individual to meet performance standards and safety criteria while in attendance at clinical affiliate's and/or classroom. This may include but is not limited to: 1) slurred speech; (2) impaired motor status; (3) odor of alcohol; (4) altered thought processes; and/or (5) inappropriate behavior. Evidence of impaired behavior or performance will result in the initiation of the procedure below for drug testing. Dismissal from the Radiologic Sciences Program may occur as a result of the following:

- Failure to comply with request for immediate testing for drugs/alcohol
- Verified positive testing for alcohol, illegal drugs or controlled substances

Students dismissed from the Radiologic Sciences Program for substance abuse will be referred to the Dean of Academic Affairs on a confidential basis for consultation and referral assistance. Students who can provide written documentation of successful completion of a substance abuse rehabilitation program may reapply to the Radiologic Sciences Program for consideration of readmission.

Procedure for drug/alcohol testing a student due to reasonable suspicion and/or cause:

- 1) The student agrees to be tested and share the results of the test with the Program Director.
- 2) The supervising technologist/didactic instructor will remove the student from the patient care area/classroom/laboratory and request the student agree to immediate drug and alcohol testing. **Testing will be done at the student's expense.**
- 3) Testing will be done by the clinical affiliate when an event occurs at any clinical facility. The Program Director or designated faculty will contact the lab for onsite testing and holding of the student until such time it is deemed safe for student to travel.
 - a. The clinical liaison of the clinical affiliate should be notified of the occurrence. The student will be escorted by the supervising faculty/supervising technologist/Clinical Instructor off/out of the department to a private location for testing. Authorization for urine and blood samples for drug screening will be obtained from the student by the lab personnel.
- 4) The student will be transported back to the campus/home by family, friend or faculty if it is deemed unsafe for the student to transport them self. Arrangements will be made by the student for their vehicle to be picked up.
- 5) Documentation of the observed behavior indicating impairment should be made by supervising faculty staff member.

Learning Environment Policies

Appearance/Uniform Policy

In an effort to inspire patient comfort and confidence in the caregiver, students are expected to appear in complete uniform or other approved attire and exhibit professional demeanor at all times while in their respective clinical areas.

- A school uniform is required
- Uniforms are to be clean and pressed and must also be in synch with the clinical affiliate “dress code.” Pants must cover the entire leg and be short enough that they do not touch the floor
- Students may wear a solid white cotton knit shirt underneath their uniform top for warmth
- A student name pin/badge/photo ID required in the clinical setting per facility policy must be worn along with radiation monitoring any time the student is in the clinical area
- Hair must be confined off the collar and away from the face at all times. There shall be no ornamentation in the hair. If something is needed to keep hair confined, it should be non-ostentatious. Gentlemen are allowed to have a mustache and a beard. The moustache must be neatly trimmed. The beard must also be neatly sculpted to the face. At the discretion of the instructor, the student may be asked to wear a beard bag if there is a concern for infection control. Otherwise, gentlemen must be clean shaven
- Clean white or black shoes. Socks are to be worn and must match the color of the shoe
- Hand jewelry is limited to a single ring without stones and with a smooth surface. Very small single, stud-type earrings may be worn in some clinical areas. If the instructor feels the ring or studs are inappropriate, you will be asked to remove them. No other jewelry is permissible
- Nails must be kept short. Colored nail polish and acrylic nails may not be worn
- No gum chewing is permitted in clinical areas
- When in the clinical affiliate, but not in uniform, students will wear their name pin and a lab coat over their street (business casual) cloths. Some sites may not require a lab coat; but, only a name pin
- The odor of cigarettes is not allowed or tolerated
- Students will refrain from wearing perfume or fragrant lotions or hair products to the clinical affiliate
- Tattoos deemed offensive by the clinical affiliate/clinical instructor/or site Director will be covered

Interpretation of this policy will be at the discretion of the clinical instructor. Students will be expected to adhere to this decision. Students who fail to meet these guidelines will be sent home. This absence will be counted as a clinical absence.

Cell Phone Policy

Cell phones may not be used in class or the clinical agency unless directed by the instructor. Students must follow clinical agency policies, including use of cell phones and social media. (See Social Media Policy)

Cheating and Plagiarism

Radiologic Science faculty and staff, in consultation with the Academic Dean will enforce and adhere to VTC Policy #107 "Cheating and Plagiarism" and will follow the recommended process as outlined.

Closing (School)

Closing and delays stemming from inclement weather have historically been very rare. Because hospitals do not close, our radiologic science students must become accustomed to planning ahead for inclement weather. However, if weather is such that closing or delayed opening is advisable, students are expected to follow the procedure outlined in their region/site. Closings may vary by clinical site and start time; not all sites may be closed on any given day.

Social Media Policy (SMP)

VTC students have an ethical and legal obligation to maintain patient privacy and confidentiality at all times. This includes upholding the provisions set forth under federal law (HIPPA). The VTC Social Media Policy (SMP) provides guidance to students, faculty, staff and our clinical affiliates and establishes consequences if the SMP has been violated.

Guidelines:

1. Student technologists must adhere to legal and ethical responsibilities and VTC student conduct policies.
2. Student technologists must adhere to clinical agency policies regarding their responsibility to protect patient privacy whether on line or off line. This includes protecting patients' name and any information that may lead to the identification of a patient.
3. Student technologists must maintain professional boundaries in the use of electronic media. This means establishing, communicating and enforcing professional boundaries with patients in the on-line environment.
4. Student technologists may not share, post or otherwise disseminate any information including images about a patient or information gained in the nurse-patient relationship with anyone unless there is a patient care-related need to disclose the information or other legal obligation to do so.
5. Student technologists are discouraged from interacting with patients using social media.

6. Student technologists should evaluate all their social media postings with the understanding that a patient, colleague, educational institution or employer could potentially view those postings.
7. Student technologists as the patient's advocate have an ethical obligation to take appropriate action regarding instances of questionable healthcare delivery at an individual or systems level that reflect incompetent, unethical, illegal, or impaired practice. Student technologists who view social media content posted by a colleague that violates ethical or legal standards should bring the questionable content to the attention of the colleague and the VTC Radiologic Science faculty/staff so that appropriate action can be taken.
8. A student who uses social media to harass, bully, or violate professional codes of conduct may be dismissed from the program, if the behavior violates VSC Policy 311. A suspected violation of the SMP will result in the following actions:
9. An investigation of the suspected violation will be conducted by the VTC Radiologic Science faculty/staff and a report of findings will be presented to the Academic Dean.
10. Consideration will be given to determine the intent of the student technologists. Remediation will be provided consistent with the nature of the violation.

If the violation is determined to be of serious nature, consequences will reflect the nature of the violation and may include administrative dismissal from the radiologic science program.

Substance Abuse Policy

In conjunction with the VTC Code of Conduct and Substance Abuse statements, the following Radiologic Science policy has been adopted. Students will not report to the classroom, lab, or clinical area while under the influence of drugs and/or alcohol.

1. If a student is suspected of being impaired (i.e. odor of alcohol/marijuana, slurred speech, bloodshot eyes, ambulatory problems, inability to comprehend or follow oral or written direction, or other such indications) in a clinical or other college setting, the student's faculty/clinical instructor, or any other instructor or college official, should, whenever possible, seek verification of such suspicion by another college instructor or official or a member of the agency's medical imaging staff. If the student is suspected of being impaired, the student shall be approached by the professor or another appropriate college or clinical official. If, after evaluation, the professor or other appropriate official believes the student is impaired, then the student shall be required to safely leave the clinical or academic setting immediately. The faculty member will immediately inform the Program Director or designee when a student has exhibited signs of impairment that warrant dismissal from the class or clinical setting.

Required Documentation:

2. Observed Behavior – Reasonable Cause Tool
The purpose of this tool is to document faculty or clinical instructor assessments of a student's appearance, behavior(s), affect, speech, and motor skills that indicate impairment of drugs and/or alcohol.

The faculty member/clinical instructor will document the reason(s) for suspecting that a student is impaired by completing VTC's Observed Behavior – Reasonable Cause Tool within 24 hours of identifying signs of impairment. This tool will be signed by the faculty or clinical instructor who suspected student impairment, a witness to the student's behavior at the time, and the student.

3. Return to Class/Clinical Agreement Form

The purpose of this form is to provide support for students suspected of being impaired. This form is an agreement between the student and the college which is intended to ensure that professional standards are upheld. It is a contract that specifies the consequences of reporting to class or clinical while impaired.

Prior to returning to the class/clinical setting, the student and Program Director (or designee) will review the Return to Class/Clinical Agreement form. The student will sign and receive a copy of this form which specifies that he or she agrees to meet performance standards regarding professional conduct. By signing the Return to Class/Clinical Agreement form, the student agrees to undergo an alcohol and/or drug assessment, abide by recommendations made by a substance abuse treatment agency regarding to return to class/clinical, and not attend learning activities when unfit to work. The student's failure to comply with the conditions of this document will be grounds for disciplinary action, including dismissal from the college.

A student's failure to adhere to the conditions of the Return to Class/Clinical Agreement form will be reported to the Academic Dean and Dean of Enrollment and Student Affairs for appropriate disciplinary and/or academic process and action.

Until due process is completed, the student will not be allowed to attend clinical. The student may attend if there is no further evidence of impairment.

Student Health Policy

Students are responsible for their own health care and incurred costs. When students become ill or injured while in class or in the clinical/preceptorship area, they are to report to the instructor to assist in arrangements for patient care. The Program Director will always be notified of any illness or injury. There are specific instances when the college's liability insurance may apply to an injury.

The hospital emergency room is designed to care for true emergencies, NOT colds, sore throats, etc. Students are responsible for their own medical bills, unless found otherwise. Students will be expected to provide proof of health insurance or carry the VTC student health insurance policy.

The Program Director may request a physical examination or medical clearance from a health care provider if this seems necessary. For the protection of the student, the patients, or other students, any exposure to infectious disease must be reported to the Site Director.

Requirements for Clinical/Preceptorship Placement

The following documentation is required by VTC and the contracted clinical agencies prior to placement:

- Health history and physical examination
- Records of specified immunizations/communicable disease
- Background check
- Fingerprint reports
- BLS certification
- Proof of health insurance
- Report of drug screen (selected sites)

Failure to provide ANY of this documentation may result in student clinical absence(s) until the documentation is deemed complete.

Cheating and Plagiarism

The faculty and staff, in consultation with the Program Director will enforce and adhere to Vermont Technical College Policy #107 "Cheating and Plagiarism" and will follow the recommended process as outlined.

Student Handbook Verification

Having read this student handbook, I agree to follow the policies contained therein. The program reserves the right to make changes in the policies and guideline as needed, and to modify the curriculum as necessary and approved by the Programs and Curriculum Committee. This sign-off sheet will be kept by the Program Director.

Print Name: _____

Student Signature: _____

Date: _____