







# Radiologic Technology CLINICAL Handbook

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2800 W. Gore Blvd. | Lawton, OK 73505 | 580.581.2200 | www.cameron.edu

#### MISSION STATEMENT

Cameron University provides a diverse and dynamic student body access to quality educational opportunities; fosters a student-centered academic environment that combines innovative classroom teaching with experiential learning; prepares students for professional success, responsible citizenship, life-long learning, and meaningful contributions to a rapidly changing world; and is a driving force in the cultural life and economic development of the region.

#### **CORE VALUES**

#### We Value

- Student learning as our top priority
- Excellence in teaching, scholarship, service, and mentoring:
  - Investing in people: The growth and development of our students, faculty and staff in a learning environment based on integrity, respect, and ethical behavior that encourages and provides opportunities for professional improvement
- Leadership in our community and region that emphasizes:
  - Stimulating economic development
  - Forming partnerships and collaborative relationships
  - Providing cultural and social development
  - Serving the community and region by sharing our expertise
- Shared governance that includes:
  - Emphasizing teamwork
  - Facilitating open and effective communication
  - Providing opportunities for active participation by all constituencies
- Diversity among our students, faculty, and staff as demonstrated by:
  - Providing access to educational and teaching opportunities for all constituents
  - Promoting tolerance through a free and open exchange of ideas
- Responsible stewardship of public and private resources, the public trust, and Cameron's future that includes:
  - Focusing resources to achieve optimal student learning
  - Increasing student access to quality higher education
  - Establishing a reliable stream of public and private revenue
  - Holding administrative costs to a minimum
  - Enhancing alumni involvement
  - Providing accountability in key areas such as student learning and management of resources

## **EQUAL OPPORTUNITY POLICY**

Cameron University is committed to the goal of achieving equal educational opportunity and full participation for students with disabilities. Consistent with the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Cameron University ensures that no "qualified individual with a disability" will be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination solely based on disability under any program or activity offered by Cameron University.

Cameron University has a policy of internal adjudication in matters relating to alleged discrimination. Any faculty member, staff member, or student, including, without restriction, those on temporary or part-time status, who believes that he or she has been discriminated against, harassed, or retaliated against should file a complaint under the Grievance Procedure. Any attempt to penalize or retaliate against a person filing a complaint or participating in the investigation of a complaint of discrimination and/or harassment will be treated as a separate and a distinct violation of Cameron University policy.

This institution in compliance with all applicable Federal and State laws and regulations does not discriminate on the basis of race, color, national origin, sexual orientation, genetic information, sex, age, religion, disability, political beliefs, or status as a veteran in any of its policies, practices, or procedures. This includes but is not limited to admissions, employment, housing, financial aid, and educational services.

A summary of applicable laws is provided below.

Title VI of the Civil Rights Act of 1964 states, "No person in the United States shall, on grounds of race, color, or national origin, be excluded from, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." Title IX of the Education Amendments of 1972 states, "No person shall, on the basis of sex, be excluded from participation in, be denied the benefits of, of be subjected to discrimination under any education program or activity receiving federal financial assistance." The Age Discrimination Act of 1975 and implementing regulations states, "The Age Discrimination Act prohibits discrimination on the basis of age in programs or activities receiving federal financial assistance."

Section 504 of the Rehabilitation Act of 1973 states, "No person or otherwise qualified handicapped individual shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."

Title II of the Americans with Disabilities Act of 1990 (ADA) states, "Subject to the provisions of this title, no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subject to discrimination by any such entity."

## DISABILITY ACCOMMODATIONS

Students with disabilities have the right to access programs and services at Cameron University as stated in Section 504 of the Rehabilitation Act of 1973, as amended, which states:

"No otherwise qualified disabled individual...shall, solely by reason of his or her disability, be excluded from participation in, be denied the benefit of, or be subjected to discrimination under any program or any program or activity receiving federal financial assistance..." and in accordance with the American with Disabilities Act (ADA) of 1990, which states:"... no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subject to discrimination by

any such entity. . . no individual shall be discriminated against on the basis of disability in the full and equal enjoyment of the goods, services, facilities, privileges, advantages or accommodations of any place of public accommodation."

Students who qualify for classroom accommodations must request accommodations by contacting the Office of Student Development as soon as possible prior to the beginning of the semester. Any student who is currently receiving accommodations and has problems or concerns regarding the accommodations should contact Student Development immediately.

To contact the Office of Student Development: (580) 581-2209, North Shepler 314, **student\_development@cameron.edu**. Visit **www.cameron.edu/disability\_services** for more information.

## CAMERON UNIVERSITY IS ACCREDITED

#### THE HIGHER LEARNING COMMISSION

230 South LaSalle, Suite 7-500 Chicago, Illinois 60602-2504.

They can be reached by phone at 800-621-7440, or at http://www.ncahlc.org.

## OTICE OF NONDISCRIMINATION

Great Plains Technology Center does not discriminate on the basis of race, color, national origin, religion, gender, gender expression, sexual orientation, gender identity, or qualified disability or veteran's status in admission to its programs, services, activities, or access to them, in treatment of individuals, or in any aspect of the Technology Center's operations.

## MPUS SECURITY AC

In order to comply with federal regulation 34 CFR 668.36 Campus Security Act, the Campus Crime Report for Great Plains Technology Center is available on our web site at www.greatplains.edu. The report lists statistics of the crime committed on Great Plains Campuses over a 3-year period and information/policies regarding campus crime.

## SEPA REOUIREMENTS

Great Plains Technology Center is in compliance with USEPA requirements for asbestos. Management plan is on file in Building 500.

## CONTINGENCY PLAN- PROGRAM

In the event of any type of catastrophic event such as a possible Weather-Related Closure or Emergency and/or Worldwide Pandemic, such as we have encountered with COVID-19 that could affect student learning and program operations, the Modes of Instruction/Course Formats may require changes to accommodate the continuance of fulfilling course competency education for students. These may include, but not limited to the following: Lecture (Face-to-Face), ZOOM Distance (100% coursework ZOOM), Blended Course (51%-99% ZOOM with some on-campus sessions), Hybrid (50% ZOOM and 50% ZOOM at regular scheduled time), Attend Anywhere (100% of course either ZOOM or face-to-face or any mixture of ZOOM and face-to-face), Real Time ZOOM (100% ZOOM at regularly scheduled times)

In the cases of a pandemic emergency: All students, faculty and staff in courses are required to wear nose and mouth face coverings while in classrooms, labs, and other shared instructional spaces. Even with social distancing in classrooms, the risk to our community health is too high not to wear masks as a preventative measure in shared spaces. Faculty may deny a student entry into the room if the student is not correctly wearing a functional nose and mouth face covering. Faculty will remind students to wear their face coverings. If students do not comply, the faculty member may instruct them to leave the space. If a synchronous video (Zoom) option for the course is available, faculty may ask students to join the class remotely.

Campus Safety may be called if students refuse to wear an appropriate face covering correctly and if they refuse to leave the classroom.

Students who violate the syllabus policy on Face Covering may be counted tardy or absent, and eventually may be Administratively Withdrawn from the course.

Students who are unable to wear face coverings should contact the Office of Student Development at 580.581.2209 or by email:  $student\_development@cameron.edu\ .$ 

For instructions on the wear and care of face coverings, please refer to the Centers for Disease Control: https://www.cdc.gov/coronavirus/2019-ncov/ prevent-getting-sick/about-face-coverings.html

## MISSION STATEMENT- PROGRAM

Cameron University's Radiologic Technology Program's mission is to prepare a wide-ranging and vibrant student population; access to exemplary educational opportunities, for professional success in the radiologic sciences; by fostering resourceful classroom teaching with realistic learning, developing competitive workforce knowledge, effective leadership, and life-long learning; that will lead to a meaningful contribution in the rapidly changing health care environment.

The mission of Cameron University's department of Agriculture, Biology and Health Sciences is to provide high quality instruction of students at the undergraduate level using a multi-disciplinary approach that emphasizes active learning, problem solving and critical thinking.

## GOALS AND STUDENT LEARNING OUTCOMES

The goals of the Cameron University Radiologic Technology Program are:

#### GOAL#1

#### Students will demonstrate critical thinking skills.

#### STUDENT LEARNING OUTCOMES

- 1. Students identify critical thinking situations in which non-routine procedures are necessary.
- 2. Students indicate critical thinking skills through image analysis of radiographs for diagnostic quality.

#### GOAL #2

#### Students will demonstrate clinical competence in their knowledge and technical skills. STUDENT LEARNING OUTCOMES

- 1. Students accomplish clinical competency by performing routine procedures.
- 2. Students demonstrate clinical competence by evaluating technical needs in radiographic examinations.

#### GOAL#3

## Students will demonstrate communication skills necessary to effectively interact with patients and healthcare professionals.

#### STUDENT LEARNING OUTCOMES

- 1. Students apply communication effectively with patients.
- 2. Students communicate effectively with health care professionals.

#### GOAL #4

#### The program will demonstrate effectiveness.

#### STUDENT LEARNING OUTCOMES

- 1. Graduates pass the national certification exam.
- 2. Graduates demonstrate preparedness by securing employment.
- 3. Students complete the program by graduating.
- 4. Graduates indicate that they were adequately prepared to perform as entry-level practitioners.
- 5. Graduates are adequately prepared to perform as entry-level practitioners.

The Program Effectiveness Data (PED) is found in the following two areas on the program websites www.cameron.edu/rad under the Program Effectiveness Data link and within the JRCERT link, www.jrcert.org, under JRCERT's Program Effectiveness Data link for this radiography program at Cameron University.

## . Introduction

During the twenty-two months of training, the student will rotate through the various areas of the radiology department. Upon completion of each rotation, the student will be evaluated for level of performance in that area.

Each facility has its own unique Radiology Department. The experience gained at these facilities will essentially result in highly qualified graduates who can function well in any Radiology Department.

To provide the students the opportunity to gain the clinical experience necessary for them to become a competent, functional radiographer, Cameron University has agreements with the following Clinical Education Settings:

#### **CLINICAL SETTINGS**

Comanche County Memorial Hospital	Lawton, OK
Duncan Regional Hospital	Duncan, OK
Duncan Regional Orthopedic Associates, Inc	Duncan, OK
Grady Memorial Hospital	Chickasha, OK
Jackson County Memorial Hospital	Altus, OK
Reynolds Army Health Clinic	Fort Sill, OK
Southwestern Medical Center	Lawton, OK
The Imaging Center of Southwest Medical Center	Lawton, OK
The Physicians' Hospital in Anadarko	Anadarko, OK
United States Public Health Service Indian Hospital (USPHS Indian Hospital)	Lawton, OK
Urgent Med	Duncan, OK

\*The travel vehicle and cost of transportation to geographically dispersed clinical education settings are the sole financial responsibility of students.

- Students are required to maintain current records of vaccinations, immunizations, annual PPD, Hepatitis B vaccine, CPR, negative drug screening, and background check throughout the 22 months of training.
- It is the student's responsibility to submit copies of these records to the Radiologic Technology Program, to be kept in the student's file. If the student's vaccinations, immunizations, PPD, Hepatitis B vaccine, and/or CPR are not current during the 22 months of training, the student will not be allowed to go to the Clinical Setting.

(Non-compliance of proper documentation will result in the student being marked as absent for the clinical days missed until the records are brought up to date. (See "absences" Radiologic Technology Student Handbook.)

## II. Background Checks

#### A. CRIMINAL BACKGROUND CHECKS

To protect patients and the general public, obtaining a cleared background check on each student (18 years of age and older) and instructor participating in clinical rotations is required by our clinical education settings / clinical sites. Each clinical education setting has their own requirements for processing background checks, which may include fingerprinting. These requirements are found in the individual contracts with

the clinical education setting and Cameron University. Program and clinical education settings reserve the right to review any information that could impact the student's ability to function safely in the clinical education setting.

Each student's background check will be processed by the same background check facility designated by the program and/or by the clinical education setting. NO other background check will be accepted. The following (including, but not limited to) will be verified and must comply with the requirement. All findings must be satisfactory according to the clinical rotation agreement for each clinical education setting.

- Social Security Number Verification
- Criminal Search last 7 years
- Violent Sexual Offender and Predator Registry Search
- U.S. Treasury Office of Foreign Assets Control (OFAC)
- List of Specially Designated Nationals (SDN)

#### Fingerprint Verification

Additionally, students must not have an unfavorable record with any of the clinical education settings from a previous employment, another clinical rotation, or any other reason.

The clinical education setting may refuse any student from participating in the clinical experience who has a criminal background check record that relates to a felony or misdemeanor, or for any nature concerning the safety and security of patients, or any other reason. Conviction/criminal history records are reviewed as they relate to the content and nature of the curriculum and the safety and security of patients and the public.

A conviction/criminal history record does not necessarily disqualify an individual for admission in a career major. However, if a conviction/criminal history record is not approved by a clinical education setting and the student is unable to receive the required clinical components, then the student may not be able to continue in the career major in which he/she has applied.

The dissemination of self-disclosure information, background check results, and conviction records, whether in or outside the state of Oklahoma as deemed necessary by the school, may be provided to the clinical education settings to meet requirements of the clinical education settings without disclosing the student's identity.

If the student leaves the career major and is later readmitted, another check will be completed only if it has been longer than 30 days.

The program will conduct a background check, which includes sex offender status, felonies, and misdemeanors. This will be done prior to the start of your first year and during your second year.

A conviction/criminal history record does not necessarily disqualify an individual for admission in a program.

#### **B. CLINICAL SITE PRIVILEGES**

If an applicant is denied clinical privileges at a facility, and that denial deems them unable to meet clinical objectives, the applicant will be unable to complete the program and unable to take the certification exam.

#### C. AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGIST APPLICATION FOR EXAMINATION RESPONSE:

The American Registry of RadiologicTechnologists requires a response to the following questions to their Application for Examination:

Have you ever been charged with or convicted of a *misdemeanor or felony* (This includes court convictions and military court martials)?

#### Answer "Yes" if you have:

- · Charges or convictions- including those that were: stayed, withheld/deferred, set aside, or suspended;
- Any plea of guilty, Alford pleas, or pleas of no contest (nolo contendere),
- Court conditions applied to your charge including court supervision, probation, or pre-trial diversion.
- Traffic violations charged as misdemeanors or felonies
- · Traffic violations that involved drugs or alcohol

#### Answer "No" if you have no offenses.

#### Also answer "No" if you have:

- Offenses and convictions that occurred before you turned 18 and that were processed in juvenile court.
- Speeding and parking tickets that were not charged as misdemeanors or felonies and that did not involve drugs or alcohol (if you have any traffic violation that involved drugs and/or alcohol, you must answer "Yes"
- Charges that were dismissed with no court conditions required (if conditions were required, you must answer "Yes"
- Court records that were sealed or expunged (if you do not have court documents that prove your case was sealed or expunged, you must answer "Yes")
- Offenses previously reported to ARRT and about which ARRT has sent you communication.

#### Has a regulatory authority or certification board (other than ARRT) ever done one or more of the following?

- Denied, revoked, or suspended your professional license, permit, registration, or certification?
- · Placed you on probation (excluding ARRT Continuing Education probation), under consent agreement, or under consent order?
- Allowed voluntary surrender of your professional license permit, registration, or certification?
- Subjected you to any conditions or disciplinary actions?

Answer "Yes" if one or more of these apply to you and the organization imposing the action was not ARRT.

#### Answer "No":

- If you have no offenses
- If your only offense is ARRT Continuing Education (CE) probation
- For offenses previously reported to ARRT and for which ARRT has sent you communication

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

· Answer "No" for offenses previously reported to ARRT and for which ARRT has sent you communication.

- Whether you answer "Yes" or "no" to this question, you will:
- Agree to "Written Consent Under the Family Educational Rights and Privacy Act, 20 U.S.C. Section 1232g ("FERPA") which allows ARRT to:
- Communicate freely and openly with your Educational Program Director
- Obtain specific parts of your education records in order to verify whether you have ever been suspended, dismissed, or expelled from an
  educational program that you attended in order to meet ARRT certification and registration requirements
- Waive, in part, the confidentiality of your education records under "FERPA"
- Consent to the release of any and all education records relating to your suspension, dismissal, or expulsion to ARRT for purposes of its review of
  your application for certification and registration by ARRT
- Agree to promptly execute any additional written consents under "FERPA" if your educational program has a different requirement
- Remember, not reporting an ethics violation is itself a violation.

#### If you answered "Yes":

#### Along with this completed application, include:

- A written explanation of the events
- Copies of all documentation relevant to the matter (do not send original records)

For additional guidance, visit www.arrt.org and search for the Ethics Review Checklist for Honor Code Violations, or call at 651.687.0048, and select the option for ethics information.

#### **PLEASE NOTE:**

The Radiologic Technology program will require accepted students to submit a pre-application to ARRT if the student has answered YES to any of the above questions prior to the 1st Fall semester in program, with deadlines of August 1st, or forfeit their acceptance into the program.

The pertinent documents will need to be submitted to the program to be kept in student files **and** submitted to the ARRT with the certification application for Radiography in the spring semester before graduation or as soon as possible, if the incident occurs while in the program, to avoid delays of student being able to take the national certification upon completion of the Radiologic Technology program.

ARRT findings upon their review received from student will also need to be submitted to the program to be kept in the student's files, so the program is able to document the findings for future accreditation and follow the ARRT procedures for program director to verify completion graduation endorsement.

Student is advised that this submission of additional documentation for review by the Ethics Committee will delay the student in scheduling a test date to take the national certification in radiography and the Ethics Committee may deny an applicant from taking the national certification in radiography if so deemed that the ethical conduct was too severe to warrant permission to sit for the national certification in radiography.

The individual may submit a pre-application form at any time either before or after entry, if incident occurs while in the program, into an approved educational program. This review may enable the individual to avoid delays in processing the application for examination that is made at the time of graduation. The pre-application must be requested directly from the ARRT. Submission of a pre-application request form does not waive the application for examination, the examination fee, or any of the other application procedures. Confirmation from ARRT may take up to 4 months.

To request a pre-application from ARRT, write to:

American Registry of Radiologic Technologists 1255 Northland Drive St. Paul. MN 55120-1155

Or refer calls to Examination Services, 651-687-0048.

To contact JRCERT, write to:

Joint Review Committee on Education in Radiologic Technology 20 North Wacker Drive, Suite 2850 Chicago, IL 60606-3182

312-704-5300 and www.jrcert.org

Further information regarding reporting requirements may be assessed on the ARRT website under "Ethics FAQs", or by phoning ARRT at (651) 687-0048, ext. 8580.

- NOTE: Clinical education settings may deny students access to clinical rotations upon the findings of the background check regarding sex offenders, felonies and/or misdemeanors, prior to clinical rotations and throughout the program.
- The program will assist the student to complete the program, but without participation in the clinical rotation component of the Radiologic Technology program curriculum within the course, it will be impossible for the student to fulfill the requirements for graduation from the program and they would not be eligible to take the National Certification in Radiography, conducted by the ARRT.

## III. DRUG FREE SCHOOL'S POLICY STATEMENT

#### A. ALCOHOL AND DRUG FREE CAMPUS POLICY

- PURPOSE AND SCOPE: The abuse of alcohol and other drugs interferes with the processes of learning, teaching, research, and
  public service, which are the functions of Cameron University. To accomplish its mission, and further to comply with the Drug Free
  Schools and Communities Act Amendments of 1989, Cameron University has promulgated this policy and directed its distribution
  to each of its students.
- 2.01 POLICY: Pursuant to local, state, and federal laws, and its own rules and regulations, Cameron University prohibits the
  unlawful possession, use, manufacture, or distribution of alcohol and other drugs by students and employees on university owned
  or controlled premises, as a part of any university sponsored activities, or in the workplace.
- 3.01 INTERNAL SANCTIONS: Any student or employee who violates this policy shall be subject to disciplinary action, including, without limitation, probation, expulsion, suspension, or termination of employment; may be required to participate satisfactorily in an appropriate rehabilitation program; or may be referred for prosecution.
- 4.01 EXTERNAL SANCTIONS: Violation of applicable local, state, and federal laws governing the possession, use, manufacture, or distribution of alcohol and other drugs may subject students or employees to fines, imprisonment, and/or community service requirements. Convictions become part of an individual's criminal record and may prohibit certain career and professional opportunities.
- 5.01 HEALTH RISKS: Abuse of drugs and alcohol can result in behavioral changes; impairment of judgment and coordination; elevated
  or lowered blood pressure; depression; anxiety; hallucinations; convulsions; temporary and permanent loss of memory; damage to
  the heart, lungs, liver, and brain; sterility; lowered immune system and increased infection; cancer, emphysema; chronic
  bronchitis, and death.
- 6.01 ALCOHOL/OTHER DRUG ASSISTANCE PROGRAMS: Numerous programs are available in the Lawton area to help Cameron students and employees deal with substance abuse related issues. Federal laws insure all persons seeking help for alcohol and/or other drug problems will be treated with respect and in a confidential manner. Please contact the Student Wellness Center for information or assistance.
  - 7.01 COORDINATION AND REFERENCE: Other policies, rules and regulations of Cameron University also deal with drug and alcohol abuse and complement this Drug-Free Campus Policy statement (such as Appendix C). This policy is based on the Drug Free Workplace Act of 1988 (P.L. 100-690, Title V, Subtitle D) and the Drug Free Schools and Communities Act Amendments of 1989 (P.L. 101-226).

ON CAMPUS		
Student Wellness Center, North Shepler 1st Floor (for counseling or referral)	581-6725	
OFF CAMPUS	5	
Valley Hope Treatment	800-544-5101	
Taliaferro Community Health Center	248-5780	
Silver Lining (Adults)	357-7827	
Roadback, Inc. Halfway Houses	357-6889	
Marie Detty Youth & Family Services	248-6450	
Southwestern Behavioral Health Center	536-0077	
Christian Family Counseling Center	248-0983	
Goodyear Employee Assistance Program (for Goodyear Employees & Dependents)	531-5875	
Western Area Service Committee of Oklahoma	866-524-7068	
HOT LINES - 7 DAYS A WEEK, 24 HOURS A DAY		
United Way Helpline	355-7575	
Reach-Out Hotline	880-522-9054	
Substance Abuse Helpline	800-662-HELP	

#### B. DRUG SCREEN POLICY - ADULT MEDICAL PROGRAMS

- Students in medical programs are required to be screened for substance abuse prior to clinical practicums. The purposes of the drug
  screen policy are to comply with regulations of area health care agencies and to provide optimal care to patients. Students must abide by
  the drug screen policies of each health care agency in which a student is assigned for clinical practicums. Area agencies require that
  students not be involved in the use, or possession of alcohol or non-prescribed drugs. Also, students may not use prescription drugs
  illegally.
- 2. Students will submit authorization allowing a facility, designated by the program, to test body fluids for the presence of illicit drugs. In addition to initial screening that will occur when the student is admitted to a medical program, students may be subject to testing when requested by a specific clinical agency or for cause; such as, slurred speech, impaired physical coordination, inappropriate behavior, or pupillary changes.
- 3. Initial Drug Screening. Student failure to submit to a drug screen, attempting to tamper with, contaminate, or switch a sample will result in the student not being admitted into a medical program. A diluted result will require a retest, at the student's expense. An applicant with a positive drug screen will not be admitted into the program.
- 4. Drug Screening of Existing Students. Student failure to submit to a drug screen, attempting to tamper with, contaminate, or switch a sample will result in the student not being allowed to meet course objectives for clinical practicums; therefore, progression in the program will not be permitted. A diluted result will require a retest, at the school's expense. Students who test positive for illicit drug use may not continue in clinical practicums and therefore cannot meet objectives for clinical courses. Following school policy, they will be dismissed from the program and may apply for readmission. To be considered for readmission, the student must submit a letter from a treatment agency verifying completion of a drug treatment program. Readmission is not guaranteed. If a student is readmitted and tests positive for substance abuse a second time, the student is not eligible for further admission. If a student tests positive for a prescribed drug, the student must submit a valid prescription, providing the drug level is within prescribed limits and that the level does not indicate abuse.
- 5. Appeal Procedure. If a urine drug screen indicates positive for the presence of unauthorized (illegal or non-prescribed) drugs, the student may request a hair follicle drug screen to be performed within 24 hours of receiving the results of their drug test. (If results of urine drug screen are received on Friday, the student will have until Monday of the following week to have a hair follicle drug screen performed.) The hair follicle drug screen will be at the student's expense, performed at the agency specified by GPTC. While awaiting results of a hair follicle drug screen, the student will not be allowed to attend practicum. If the hair follicle drug screen is negative, the applicant may enter the program, or a student enrolled in the program may remain in the program. If the hair follicle drug screen confirms the results of the urine drug screen, the applicant will not be admitted into the program. An existing student will be dismissed from the program and may reapply for admission.
- 6. All test results will be filed in the Radiologic Technology Campus Health Careers Office and shall remain confidential.
- 7. Radiologic Technology students will have an additional drug screen conducted during the second academic year, and prior to submitting the ARRT National Certification application. The prior drug screen policy will be in effect for this additional drug screen.

### IV. SUPERVISION POLICIES

Failure to abide to the following Policies and Procedures may result in 3 days suspension or recommendation for dismissal from the Radiologic Technology Program.

The need for **extensive** clinical experience creates a dilemma. Students need to learn how to function well within the clinical environment. Initially, close supervision is essential; however, the quicker you learn to function under limited supervision, the easier it will be for you to make the transition from student to technologist upon graduation. Our affiliated hospitals use a clinical environment that has resulted in highly qualified graduates who can function well in any radiology department. Their staffing is such that the patient load could be handled without students, but the availability of students improves their patient-flow and the quality of patient care.

A one-to-one ratio of technologist-to-student is maintained at all Clinical Education Settings.

Until a student achieves and documents competency in any given procedure, all clinical assignments shall be carried out under the direct supervision of ARRT registered radiographers.

#### A. DIRECT SUPERVISION POLICY

Under the direct supervision policy, Students will not perform any imaging exam by themselves without an ARRT registered radiographer physically present in the room with the student while the student is performing the exams. After the student has demonstrated competency in a given exam the student may then fall under indirect supervision policy for any subsequent exams of the same kind that the student has a competency in.

JRCERT defines Direct Supervision and Includes:

- 1. An ARRT registered radiographer reviews the procedure for examination/procedure in relation to the student's achievement.
- 2. An ARRT registered radiographer evaluates the condition of the patient in relation to the student's knowledge.
- 3. An ARRT registered radiographer is physically present during the conduct of the procedure.
- 4. An ARRT registered radiographer reviews and approves the procedure and/or image(s).
- 5. \*\*A qualified ARRT registered radiographer is present in the examination room when a student repeats a radiograph, regardless of the students' skill level or prior achieved competency.
- 6. Students must be directly supervised during all surgical and mobile exams, including mobile fluoroscopy, procedures regardless of the level of competency.

To assure adherence of the direct supervision policy all medical imaging procedures are documented and verified on the student clinical experience log sheets by the supervising qualified radiographer's initials.

After demonstrating competency, students may perform procedures with indirect supervision.

Various procedures performed in the radiology department require injection of contrast media. Students must adhere to institutional policies regarding the injection of contrast media. Student must be competent in phlebotomy prior to being permitted to administer contrast media requiring injection

#### **B. INDIRECT SUPERVISION POLICY**

Under the indirect supervision policy, after a student achieves competency in an exam, the student may perform that exam with an ARRT registered radiographer \*immediately available within hearing distance of imaging procedure being performed, regardless of the level of student achievement.

The JRCERT defines indirect supervision as that supervision provided by a qualified radiographer immediately available to assist students, regardless of the level of student achievement. \*Immediately available is interpreted as the physical presence of a qualified radiographer adjacent to the room or location where a radiographic procedure is being performed. This availability applies to all areas where ionizing radiation equipment is in use on patients.

Students may perform radiographic imaging procedures to gain and enhance their clinical skills under \*indirect supervision only under the following criteria:

- 1. The student has demonstrated competency of imaging equipment.
- 2. The student has demonstrated competency of ordered imaging procedure.
- 3. An ARRT registered radiographer is \*immediately available, adjacent to the room or location where a radiographic imaging procedure being performed.
- 4. An ARRT registered radiographer performs quality control of finished procedure prior to the release of the radiographic images and patient.
- 5. An ARRT registered radiographer is present in the examination room when a student repeats a radiographic image, regardless of the students' skill level or prior achieved competency.

#### C. REPEAT SUPERVISION POLICY

Students repeating unsatisfactory radiographs must be under the direct supervision of an ARRT registered radiographer that is physically present in the examination room, during the actual conduct of the examination, when a student repeats an image, regardless of the students' skill level or prior achieved competency and the ARRT registered qualified radiographer must approve the student's procedure prior to re-exposure. This supervision policy will assure patient safety and proper educational practices.

After completion of the examination that included repeat radiographic images, the ARRT registered radiographer must verify their presence during the repeat images by placing their initials on the clinical experience log.

#### D. SUPERVISION POLICES COMPLIANCE

Failure to abide by the direct, indirect, and / or repeat supervision policies may result in dismissal from the program. The Radiologic Technology Program provides and maintains general comprehensive liability insurance and professional liability insurance for students. Such coverage shall be in an amount no less than one million per occurrence and three million annual aggregates, which shall be considered primary insurance for students.

Clinical Experience Log sheets must be maintained accurately daily. Students will record the type of procedure, date, and time the procedure was performed, and if they assisted, performed, or received competency on the examination. Students must obtain initials of the ARRT registered radiographer overseeing the exam for repeat films and exam verification.

Failure to maintain an accurate and up-to-date Clinical Experience Log sheets daily may result in dismissal from the program.

#### **E. SUPERVISION POLICIES DISCLOSURE**

The Direct/Indirect/Repeat Supervision Policies are made known to students, clinical preceptors, and clinical staff, by written documentation/ Memorandums given to each student, clinical preceptor, and staff at each clinical education setting utilized by Cameron University. Students, clinical preceptors, and clinical staff sign that they have read and understand the Direct/Indirect/Repeat Supervision

Policies and will adhere to school policies and procedures that are in place.

Advisory Committee Members are also reviewed of the Supervision Policies during the fall and spring semesters and documented that each clinical education setting has been informed.

To further assure adherence of the supervision policies all medical imaging procedures are documented and verified on the student clinical experience log sheets by the supervising qualified radiographer.

#### F. NO HOLD POLICY

To ensure radiation protection of Radiologic students, the program has a "No Hold Policy" which states:

- Radiologic students must not hold image receptors during any radiographic procedure.
- Radiologic students should not hold patients during any radiographic procedure when an immobilization method is the appropriate standard of care.

The following are suggestions to help adhere to the "no hold policy":

- Using family/friend or general public would be a better choice
- Using Immobilization devices, i.e., image receptor holder, sandbags, sheet immobilizers, tape, pigg-o-stat., or other commercial immobilizers would be the best choice

## V. COMPETENCY BASED CLINICAL EDUCATION PLAN

During the 22 months of training, students will be evaluated through documentation for the following:

- 1. Radiography Equipment Competency Evaluation
- 2. Radiographic Equipment Manipulation LAB Evaluation
- 3. Clinical Competency Evaluation
- 4. Simulated Radiographic Examination
- 5. Limited Computed Tomography Performance Evaluation
- 6. Clinical Proficiency Evaluation
- 7. Clinical Performance Evaluation
- 8. Limited Specialty Achievement
- 9. Clinical Experience Log

Clinical records will be maintained to ensure students confidentiality. All correspondence from clinical affiliates will be put into the Trajecsys online portal. Correspondence from Clinical Education Settings includes the forms previously listed but is not exclusive to only those forms. Upon completion of clinical competencies, students will submit competency documentation into the Trajecsys online portal. Trajecsys online portal are maintained solely by Cameron University faculty. Hand delivered documentation will not be accepted.

Students are not allowed to perform examinations for competency during part-time employment. Clocking out to perform clinical competencies will not be allowed.

Radiography Equipment Competency Evaluation During each clinical rotation to varying rooms, students are evaluated on their knowledge of each control on all radiographic consoles, equipment, and computer applications utilized in the clinical setting. Before attempting clinical competency on radiographic examinations, the student must prove competency in equipment manipulation and computer applications. When the student feels competent in the knowledge of the room and equipment, the clinical instructor or supervising technologist can be asked to observe them while demonstrating their knowledge of the radiographic consoles, equipment, and computer applications. The evaluation will be made using the criteria listed in the Radiography Equipment Competency Evaluation form.

After successfully demonstrating their knowledge, the student will be given a Radiography Equipment Competency Evaluation form, completed, and approved by the clinical preceptor or supervising technologist, which signifies that the student is capable of working with the consoles, equipment, and computer applications in the specified room. The student may then proceed to attempt competency on clinical examinations using the Clinical Competency Evaluation.

#### **Clinical Competency Evaluation**

Students must successfully complete lecture in classroom and laboratory instruction prior to achieving examinations for clinical competency. The student is expected to observe and assist a registered radiographer in performance of the examination. When the student feels competent, having requisite or adequate ability or qualities to successfully complete a radiographic or computed tomography procedure examination, the student must inform the observing qualified radiographer that the examination is being performed for competency. After successfully completing a radiographic or computed tomography procedure, the student will be given a Clinical Competency Evaluation form for radiographic examinations or a Limited Computed Tomography Performance Evaluation form for computed tomography examinations completed and approved by the observing qualified radiographer which signifies that the student can perform that examination under indirect supervision, or technologist will submit to Trajecsys online portal.

 ${\it Only CU approved ARRT registered radiographers may perform Clinical Competency Evaluations}.$ 

Upon successful completion of any competency evaluation, the student must submit their log sheet information into online portal. All clinical

competency criteria must be completed by the technologist performing the clinical competence evaluation. Students are not permitted to complete (fill-out) clinical competency criteria on clinical competency evaluation forms, or Trajecsys online portal.

During any competency evaluation, the evaluator will have the option to discontinue the competency evaluation due to lack of competency by the student. This is at the discretion of the evaluator and should be based on the specific competency evaluation criteria. Should a competency evaluation be discontinued, the student will be made aware of this decision as soon as possible. The student will be corrected and be allowed to proceed under direct supervision. The student may try to gain competency again as their skills develop.

All competency evaluations are based on the PASS/FAIL education system. Any student failing to meet competency requirements for any semester will be put on probation for the next semester. Upon failure to meet the competency requirements at the end of the following semester, the student will be dismissed from the program.

Students will be allowed the opportunity, if available, to rotate through at least one of the following specialty areas: Magnetic Resonance Imaging, Mammography/Bone Densitometry, Nuclear Medicine, Radiation Oncology, Ultrasonography, and Vascular Radiography (Cardiac Cath Lab) during Semester V (five) of their training.

#### A. COMPETENCY VALIDATION CRITERIA

All competency evaluations will be validated by Radiologic Technology Program faculty at each clinical education setting. Any examination found to be outside of established competency criteria will not be validated and the student will be notified. Upon notification, a faculty member will review the discrepancy (ies) with the student and the student will have to reattempt the exam for competency, until successfully achieving the competency with faculty validation. A valid clinical competency must be of diagnostic quality and meet all the following criteria upon validation:

- 1. All clinical competency exams must have the correct left or right marker on each radiograph to be considered as a valid student competency. (Extenuating circumstances may be considered for surgery exams and MUST BE DOCUMENTED on the student competency form or the Trajecsys online portal on the comments line by the Clinical Instructor, NOT the student.)
- 2. Exams with someone else's marker other than the student's markers will NOT be considered as a valid student competency.
- 3. Exams with partial markers that do not demonstrate the student initials or Right or Left within the collimated field will NOT be considered as a valid student competency.
- 4. Exams that only have 1 or 2 radiographic images marked out of 2, 4, or 6 radiographic images will NOT be considered as a valid student competency. (This is derived from the standpoint of the medical legal aspect of a radiograph.)
- 5. Undocumented exams, i.e., no record in hospital log or computer system, no order, and no images, will be considered as cheating and the student will be dismissed from the program.
- 6. Borderline diagnostic exams that are plentiful will NOT be considered as a valid student competency. (Extenuating circumstances, i.e., uncooperative patient or patient pathology may exist on hard-to-get competencies but MUST BE DOCUMENTED on the student competency form or Trajecsys online portal, on the comments line by the Clinical Instructor, NOT the student.) The instructors will be talking with the CI and student concerning this competency. If the CI fails to document extenuating circumstances, then the competency will NOT be considered as a valid student competency.
- 7. Students must submit the first five letters of patient's last name and the exact date of competency performed, excluding any identifying patient information to comply with HIPAA regulations, into the Trajecsys online portal system. This must be submitted on the Trajecsys online portal system Log Sheets for that Clinical Education Setting, with the correct date, correct patient, and correct exam, prior to instructors validating students' competencies, otherwise the instructors will not count the competency as valid, and student will have to repeat the exam competency.
- 8. Students' competencies MUST be submitted upon completion of that competency into the Trajecsys online portal Log Sheets and technologist MUST submit Competency achieved on the Trajecsys online portal. (Students cannot hold on to exam competencies in their pockets or notebooks with patient identifiable information, as they would be leaving the hospital and violating HIPAA regulations.)

#### **B. MANDATORY CLINICAL COMPETENCY REQUIREMENTS**

- Student must successfully complete lecture in classroom and laboratory instruction prior to achieving clinical competency.
- Clinical Competency Evaluations are counted as 20% of the student's clinical grade.
- Clinical Experience Log sheets must be maintained accurately daily. Students will record, and email faculty or submit in Trajecsys online portal, the type of procedure, date, and time the procedure was performed, if they assisted or performed the examination. Students must obtain initials of the qualified radiographer overseeing the exam for repeat images and exam verification or approval in Trajecsys online portal. Clinical logs are counted as 20% of the student's clinical grade.
- · Failure to maintain an accurate and up-to-date Clinical Experience Log sheets daily may result in dismissal from the program.
- The student will be required to complete competency examinations on the following radiographic procedures during the 22 months of training.
- \*All competencies with an asterisk (\*) must be completed by the end of Semester V to compensate for the decline of exams being
  performed.
- \*All competencies with double asterisks (\*\*) may be performed under simulated conditions with CU program faculty during Semester V.
   However, students are highly encouraged to complete all competencies on patients to achieve the highest degree of clinical competency.

#### **SEMESTER I**

#### 1. RADIOGRAPHIC EQUIPMENT / RADIOGRAPHIC COMPUTER APPLICATIONS

Minimum Of Two (2) Diagnostic Rooms w/ workstations

#### 2. CHEST

ROUTINE CHEST – Standing- (PA & Lateral)

#### 3. ABDOMEN

KUB – Supine (AP) (Adult)

#### **SEMESTER II**

#### 1. RADIOGRAPHIC EQUIPMENT / RADIOGRAPHIC COMPUTER APPLICATIONS

Students are required to complete radiographic equipment / radiographic computer applications competencies as they rotate to

each clinical education setting during semesters II-V.

#### 2. CHEST (RESPIRATORY)

\*\*DECUBITUS CHEST - (AP OR PA)

WHEELCHAIR CHEST or STRETCHER CHEST- (AP & Lateral)

\*PEDIATRIC CHEST = AGE 6 OR YOUNGER- Upright- (PA/AP & Lateral)

\*PEDIATRIC CHEST = AGE 2 OR YOUNGER- PIGG-O-STAT- (PA/AP & Lateral) or NEWBORN CHEST= 0-28 days- (PA/AP)

#### 3. UPPER EXTREMITY

FINGERS - (PA, PA Oblique, Lateral) - PA may be done as part of hand or THUMB - (AP, PA Oblique, Lateral)

HAND - (PA, PA Oblique, Fan Lateral)

WRIST - (PA, PA Oblique, Lateral)

FOREARM - (AP, Lateral)

**ELBOW JOINT - (AP, AP Oblique-external rotation, Lateral)** 

\*HUMERUS- (AP, Lateral)- Transthoracic Lateral May Be Substituted for LAT.

SHOULDER- (AP-internal rotation, AP-external rotation or AP Oblique-Grashey Method)

\*CLAVICLE - (AP, AP Axial)

\*\*ACROMIOCLAVICULAR JOINTS- (AP-with & without Weights)

#### \*TRAUMA UPPER EXTREMITY- (AP, Lateral) (non-shoulder)

Per ARRT: Trauma is considered a serious injury or shock to the body. Modifications may include variations in positioning with minimal movement of the body part.

\*TRAUMA SHOULDER - (AP, PA Oblique-Y View or Transthoracic Lat.)

**NO MANIPULATION OF THE AFFECTED ARM.** Per ARRT: Trauma is considered a serious injury or shock to the body. Modifications may include variations in positioning with minimal movement of the body part.

\*PEDIATRIC UPPER EXTREMITY or LOWER EXTREMITY- AGE 6 YRS. OR YOUNGER- (AP/PA, LAT)

#### **SEMESTER III**

#### 1. LOWER EXTREMITY

\*TOES- (AP Axial Foot, AP Oblique, Lateral of affected toe)

FOOT- (AP Axial, AP Oblique-medial rotation, Lateral)

\*\*CALCANEUS- (Axial, Lateral)

ANKLE JOINT- (AP, AP Oblique-medial rotation, Lateral)

TIBIA & FIBULA- (AP, Lateral)

KNEE JOINT- (AP, AP Oblique-medial & Lateral rotation, Lateral)

\*PATELLA- (PA/AP, Lateral, Tangential)

\*FEMUR- (AP, Lateral)

#### 2. ABDOMEN

ABDOMINAL SERIES - (AP-Supine, Upright, & Upright Above Diaphragm ABD Or Upright PA Chest)

\*ABDOMINAL SERIES- (AP/PA Decubitus )

#### **SEMESTER IV**

#### 1. LOWER EXTREMITY

PELVIS- (AP)

HIP JOINT- (AP, AP Oblique (frog leg)

TRAUMA HIP JOINT- (AP hip or pelvis, Axiolateral)

Per ARRT: Trauma is considered a serious injury or shock to the body. Modifications may include variations in positioning with minimal movement of the body part.

#### TRAUMA LOWER EXTREMITY- (AP, Lateral)

Per ARRT: trauma is considered a serious injury or shock to the body. Modifications may include variations in positioning with minimal movement of the body part.

#### 2. ALIMENTARY CANAL FLUOROSCOPY STUDIES

Student must obtain 1 Exam from this section.

All Contrast Studies should include the Room and Contrast set up by the student

UGI- (AP/PA, PA Oblique-RAO, Lateral)

BE- (AP/PA, AP Obliques-RPO & LPO, Lateral, AP/PA Axial, RT. & LT. Lateral Decubitus)

SMALL BOWEL FOLLOW THROUGH- (AP/PA) (All images up to two hours)

ESOPHAGRAM- (PA Oblique-RAO)

#### 3. CONTRAST MEDIA STUDIES

Student must obtain <u>1 Exam</u> from this section.

IVU- (AP-KUB, and both AP Obliques)

HSG	SG (Includes set up of tray/equipment, running Fluoro tower and any images ordered by physician)	
CYSTOGRAM	CYSTOGRAM (Includes set up of tray/equipment, running Fluoro tower and any images ordered by physician)	
ARTHROGRAM	(Includes set up of tray/equipment, running Fluoro tower and any images ordered by physician)	
MYELOGRAM	MYELOGRAM (Includes set up of tray/equipment, running Fluoro tower and any images ordered by physician)	
ERCP	(Includes set up of tray/equipment, running Fluoro tower and any images ordered by physician)	

SEMESTER IV cont.		
4. MOBILE AND SURGICAL		
MOBILE UPPER OR LOWER EXTREMITY- (AP/PA, Lateral)		
MOBILE CHEST- (AP)		
MOBILE KUB- (AP)		
MOBILE PEDIATRIC - AGE 6 AND UNDER		
C ARM PROCEDURE- requires manipulation of the C-Arm to obtain more than 1 projection		
SURGICAL C-ARM PROCEDURE- requires manipulation of C-Arm around a sterile field		
5. VERTEBRAE		
**CROSS-TABLE SPINE- (Lateral)- recumbent position		
CERVICAL- (AP Axial, AP-Odontoid, AP Obliques-LPO & RPO, Lateral)		
THORACIC- (AP, Lateral, Cervicothoracic Lateral)		
LUMBAR- (AP, AP Obliques-LPO & RPO, Lateral, Spot)		
**SACRUM or COCCYX- (AP Axial, Lateral)		
<b>6. GERIATRIC PATIENT</b> (Physically or Cognitively Impaired because of Aging) 65 years old and above		
CHEST- (PA & Lateral)		
UPPER EXTREMITY or LOWER EXTREMITY- (AP/PA, Lateral)		
HIP or SPINE- (AP, Lateral)		
SEMESTER V		
1. BONY THORAX		
RIBS- (AP, AP Oblique)		
2. HEAD student must obtain a minimum of 3 of the 7 exams listed. (2 of the 3 may be simulated.)		
SKULL- (PA/AP or AP/PA Axial-Caldwell, AP Axial-Towne, RT & LT Lateral)		
FACIALS- (PA/AP or AP/PA Axial-Caldwell, Parietoacanthial-Waters, RT., or LT. Lateral)		
NASAL BONES- (Parietoacanthial-Waters, LT. & RT. Lateral)		
SINUSES- (AP/PA Axial-Caldwell, Parietoacanthial-Waters, RT. or LT. Lateral)		
TMJ - (AP Axial, Axiolateral or Axiolateral Obliques)- open & closed mouth		
MANDIBLE- (PA/AP, RT. & LT. Axiolateral Obliques)		
ORBITS- (Modified Parietoacanthial-Mod. Waters, RT. & LT. Parietorbital Oblique-Rhese)		
3. COMPUTED TOMOGRAPHY		
HEAD		
ABDOMEN		
PELVIS		
CHEST		

#### C. ELECTIVE CLINICAL COMPETENCY REQUIREMENTS

Student must successfully complete lecture in classroom and laboratory instruction prior to achieving clinical competency. Students are encouraged to obtain competency of elective examinations. These examinations have reduced in quantity but are still performed in the clinical setting.

Students who obtain clinical competency in elective examinations will receive extra credit. The extra credit will be applied toward the student's clinical grade under the Clinical Applications-Mandatory Clinical Competencies category

ELECTIVE COMPETENCY- Student must obtain <u>1 exam</u> from the list of elective clinical competencies.
SACROILIAC JOINTS- (AP Axial, AP/PA Obliques)
SCOLIOSIS SERIES- (AP)
STERNUM- (PA Oblique-RAO, Lateral)
SOFT TISSUE NECK- (AP, Lateral)
SCAPULA- (AP, Lateral)
ABDOMEN- AGE 6 OR YOUNGER
SC JOINTS- (PA, PA Oblique)

#### D. MANDATORY ROOM/EQUIPMENT/COMPUTER APPLICATIONS COMPETENCIES

	SHIMADZU MOBILE	
	PHILIPS DIAGNOST ELEVA	MID ROOM 2
	SIREMOBIL ISO-C	OPC ROOM 2
	SHIMADZU RADSPEED	ER
ССМН	GE PROTEUS OPC	OPC ROOM 1, ORTHO 1 & 2
COMM	SIEMENS AXIOM LUMINOS TF OPC	OPC ROOM 3
	SIEMENS CIOS-SPIN C-ARM	OR
	OEC-9900 C-ARM	OR
	ARCADIS AVANTIC C-ARM	OR
	SIEMENS MULTITOM RAX	ROOM 1
DRH	SIEMENS YSIA MAX	ROOM 2
	SIEMENS MULTIX 5 FUSION MAX	DRH Imaging
	CARESTREAM REVOLUTION MOBILE	
DROA	DEL MEDICAL GX 525	
	GEM DR MOBILE	
JCMH	SIEMENS VERTIA	ROOM 1
	GE W/ FLUORO	ROOM 2
	SHIMADZU RADSPEED	ROOM 3

GMH	GE W/FLUORO	ROOM 2
LIH	GE DISCOVERY	ROOM 1& 2
PHA GE PROTEUS		
DACH	SHIMADZU RADSPEED	ROOM 1& 2
RACH	PHILIPS	ROOM 6
	CARESTREAM	ROOM 5
CVAIDAC	GE AMX 4 MOBILE	
SWMC	GE PERCISION	ROOM 2
SWMC- IMG CTR	PHILIPS EASY DIAGNOST	
URGENT MED	EUREKA MILESTONE HF	

## VI. CLINICAL SETTING POLICIES

#### A. CLINICAL SETTING ROTATIONS

Clinical rotations will follow hospital/clinic various shift rotations (8.5 hours) during 6 AM - 10 PM to include evening and possible weekend rotations. Please refer to academic calendar.

 Semester I
 T, TH
 6 AM – 7 PM

 Semester II - IV
 M, W, F
 6 AM – 10 PM

 Semester V
 T, TH
 6 AM – 10 PM

- In the beginning of Semester I, there will be classroom/labs Monday through Friday. October will start clinical rotations. Clinicals will be scheduled (8.5-hour shifts) from 6 AM to 7 PM and will continue every Tuesday and Thursday until the end of December.
- Semester II will start full time Clinicals. Please see above schedule for days of the week and timing.
- Any weekdays not scheduled for clinicals will be spent in the Classroom / lab setting at GPTC from 8 AM 3 PM.

Clinical rotations will be up to 1 month in duration and provides equitable learning opportunities for all students regarding learning activities and clinical assignments.

Program limits require clinical assignments for students to not be more than 10 hours per day and the total didactic and clinical involvement to not more than 40 hours per week.

Students will rotate through all clinical settings. Addition education settings may be added to include out of town rotations with evening and possible weekend rotations. Each facility has its own unique Radiology Department. The experience gained at these facilities will essentially result in highly qualified graduates who can function well in any Radiology Department.

- 1. Clinical assignments are made by the Clinical Coordinator. A schedule of classes, clinical hours, days off and holidays will be posted by the coordinator prior to the start of clinical rotations.
- 2. This schedule is subject to change depending upon availability at the Clinical Settings.
- 3. Any extenuating circumstances that prohibit students from traveling to all Clinical Settings will be dealt with on an individual basis. Example: medical conditions.

Students should be prepared to spend approximately 12-16 weeks per year at out-of-town Clinical Settings. Cost of transportation is the sole responsibility of the student.

This supervised experience is planned to enable students to gain experience in all areas of diagnostic radiology (radiography). This includes the areas of general diagnostic, urology, fluoroscopy, surgery, computed tomography, special procedures, and trauma/portable radiography.

In addition to rotating through the various diagnostic radiography rooms, students will also spend time in mobile and surgery radiography, and computed tomography. Upon completion of the student's rotation in mobile and surgery radiography, the student will be able to demonstrate their knowledge and skill in the examination and care of confined patient undergoing surgical procedures.

Limited experience is gained, if available, in Magnetic Resonance Imaging, Mammography/Bone Densitometry, Nuclear Medicine, Radiation Oncology, Ultrasonography, and Vascular Radiography (Cardiac Cath Lab). Refer to the Radiologic Technology Clinical Handbook for Specialty Rotations.

Students who are successful in the program need to have a flexible schedule, completed financial arrangements, a supportive family, reliable transportation, and reliable (and backup) childcare.

Clinical time accountability will be managed using a web-based software called, Trajecsys online portal. This is an additional fee and is not covered by Cameron University tuition fees or GPTC student need fees.

Students are expected to abide by the personnel policies of the Clinical Education Setting at all times. Clinical uniform, nametag, markers, and dosimeter must always be worn when in the clinical area.

The Clinical Education Setting administration may recommend the withdrawal of a student from their Clinical Education Setting; however, final action will be taken by Cameron University faculty.

Students are highly advised to have personal medical insurance. (Cost of insurance is the student's responsibility.) The CU faculty or Clinical Setting are not responsible for injuries incurred at the clinical site or on GPTC campus. This will include physical injuries and injuries due to contact with blood borne pathogens, body fluids, or communicable diseases through mucus membranes or infectious needle sticks. (CU carries only a medical liability blanket policy on all medical students, which is not medical insurance and will not cover personal medical illness or injuries.)

The Clinical Setting will make available emergency medical care to Cameron University students and faculty members who may be injured or become ill while at the hospital. The term "injury" includes physical injury and injury due to contact with blood borne pathogens, body fluids, or communicable diseases through mucus membranes or via infectious needle sticks. The cost of such treatment is the responsibility of the student or faculty member.

 Incident Reports at Clinical sites and CU/GPTC must be filled out within 24 hours post-injury, and student must notify the Clinical Setting's clinical preceptor and the Program Clinical Coordinator as soon as possible. (If copy of Clinical Education Setting Incident Report is put in student file, CU/ GPTC Incident Report is not necessary.)

Students are required to pass a background check and negative drug screening prior to clinical rotations. Students will also be required to pass another background check and drug screening during their 2<sup>nd</sup> year of the program.

Students are required to maintain current records of vaccinations, immunizations, original PPD, Hepatitis B vaccine, and CPR throughout the 22-months of training. It is the students' responsibility to submit copies of these records to GPTC, to be kept in the students' file.

- A. If the students' background check and drug screening is not passed, or vaccinations, immunizations, PPD, Hepatitis B vaccine, and/or CPR are not current during the 22-months of training, the student will not be allowed to go to the clinical site which may result in dismissal from the program.
- B. Costs for background check, vaccinations, immunizations, drug screening, and CPR are the student's responsibility. Radiologic Technology may require Titers to prove immunity for MMR, Varicella, and Hepatitis B.
  - NOTE: Noncompliance of proper documentation will result with the student being marked absent for clinical days missed, until records are brought up to date.
- C. Student is required to have completed two (2) Heptovax B immunizations before attending clinical rotations.

Students are expected to stay home when they have a communicable disease that may infect affiliate personnel, patients, CU or GPTC students. Students may need to take a leave of absence (temporary interrupt) from school, pending approval of administration, if the communicable disease lasts longer than five (5) consecutive days. Doctor's approval to return to school is required.

Smoking/E-Cigarettes/Vaping/Dipping/Chewing/Tobacco/Nicotine products at clinicals is not permitted, due to a smoke-free/tobacco/nicotine free environment that promotes health. If there are no patient examinations, one (1) 15-minute break will be allowed in the a.m. and one 15-minute break in the p.m. Breaks are to be taken consecutively through and not divided into segments. Approval from clinical preceptors is required prior to taking a break. (Breaks are a privilege and are not mandatory during clinical training.)

Food and Drinks- The Clinical Setting cafeteria and snack bar are available for use by the student. Trays, dishes, and silverware are not to be brought to the radiology department. There are carryout containers and plastic silverware for "to go" orders. If meals or snacks are eaten in the lounge area, please be considerate of others and clean up any mess. Students must store drinks and snacks in lounge or kitchen area only, avoiding all patient care areas where patients may see or smell food and run the risk of spillage on the radiography equipment. No food or drinks are allowed in the surgical area.

Students Use of Electronic Equipment; i.e.; Phones, Laptops, iPad, Computers, Game Devices

- A. Personal electronic devices are not allowed in the clinical settings or using the hospital's electronic devices for personal use: (i.e.; laptops, iPad, computers, game devices) Cell phones may be allowed, but can only be used in non-patient care areas and only during breaks or lunch.
- **B.** Personal telephone calls are not allowed except in emergency cases. The departmental phones are for hospital business and must be kept free for the heavy volume of communications needed to provide good patient care. Students needing to speak with other students

- should not use the telephone, but personally speak to the other student during scheduled break times.
- **C.** Students are not allowed to use the hospitals toll-free extensions for personal use, i.e., to talk to other students that are in clinical rotations at other Clinical Settings.
- D. Cellular telephones are to be on silent mode at clinical education setting. Students may only use cell phones during breaks and lunch. Cell phones are not to be displayed openly. Cell phones should not be used in patient care areas. (i.e., exam rooms, work areas, and hallways, etc.) Cell phones should not be used to text message or play games during clinical time. If student receives a call in the event of an emergency, (childcare provider, family emergency, etc.) student will go to non-patient care area to respond. Students not abiding by these guidelines may be asked not to bring cell phones to clinical settings by clinical affiliates.

If you should arrive at the Clinical Setting and learn that the school is closed, you will be supervised in the clinical area by the technologist in charge. Due to your attendance on a day when other students were off, you will be compensated with another day off.

A discount on items purchased in the cafeteria and snack bar may be given to students and faculty when the CU/GPTC issued ID badge is displayed. (Subject to change)

Students may NOT charge items purchased in the hospital. Items are payroll deducted for employees only.

#### B. Breast Imaging Clinical Rotations Position Statement Policy

The radiography program sponsored by Cameron University has revised its policy, regarding the placement of students in breast imaging clinical rotations to observe and/or perform breast imaging. (Additionally, the policy may be applied to any imaging procedures performed by professionals who are of the opposite gender of the patient.)

Under the revised policy, all students, male and female, will be offered the opportunity to participate in breast imaging clinical rotations. The program will make every effort to place a male student in a mammography clinical rotation if requested; however, the program is not able to override clinical setting policies that restrict clinical experiences in mammography to female students. Male students are advised that placement in a mammography rotation is not guaranteed and is subject to the availability of a clinical setting that allows males to participate in breast imaging procedures. The program will not deny female students the opportunity to participate in mammography rotations if clinical settings are not available to provide the same opportunity to male students.

The change in the program's policy regarding student clinical rotations in mammography is based on the sound rationale presented in a position statement on student breast imaging clinical rotations adopted initially by the Board of Directors of the Joint Review Committee on Education in Radiologic Technology (JRCERT) at its April 2016 meeting. The JRCERT position statement is included to the program's policy and is also available on the JRCERT Web site, www.jrcert.org, Programs & Faculty, Program Resources.



Position Statement on Breast Imaging Clinical Rotations Adopted by the JRCERT Board of Directors (October 2021)

The Joint Review Committee on Education in Radiologic Technology (JRCERT) **Standards for an Accredited Educational Program in Radiography** are designed to promote academic excellence, patient safety, and quality healthcare. The JRCERT accreditation process offers a means of providing assurance to the public that a program meets specific quality standards. The process helps to maintain program quality and stimulates program improvement through program assessment.

Standard Four - Objective 4.4 of the JRCERT Standards requires a program to document that it "provides timely, equitable and educationally valid clinical experiences for all students."

The JRCERT does not provide legal advice to program officials. Nevertheless, the JRCERT has received numerous inquiries regarding the placement of students in breast imaging clinical rotations. The JRCERT understands that there have been significant concerns regarding the interpretation of the JRCERT Standards regarding equitable learning opportunities for all students. As a point of clarification, the JRCERT notes that equitable means dealing fairly with all concerned. It does not necessarily mean equal.

The JRCERT has analyzed statistical data that indicates current imaging practices in mammography have resulted in minimal employment opportunities for males. Certification demographic data indicates that less than 1% of the approximately 50,000 technologists registered in mammography by the American Registry of Radiologic Technologists (ARRT) are males. Overwhelmingly, clinical site policies prohibit male students from participation in breast imaging rotations. Such participation is limited due to liability concerns, as well as consideration for the interests of the patient. These policies are established not only for breast imaging exams, but also for other gender-specific examinations performed by professionals who are the opposite gender of the patient.

Regarding breast imaging, the JRCERT has determined programs must make every effort to place students in a breast imaging clinical rotation/ procedure if requested or available. However, programs will not be expected to attempt to supersede clinical site policies that restrict breast imaging rotations/procedures to students. Students should be advised that placement in a breast imaging rotation is not guaranteed. It is noted that the same clinical site policies that are in place during the breast imaging educational rotations are most likely applicable upon

employment, thus limiting access for individuals to pursue careers in breast imaging.

The JRCERT reiterates that it is the responsibility of each clinical site to address any legal challenges related to a program's inability to place male students in a breast imaging rotation/procedure. All students should be informed and educated about the various employment opportunities and potential barriers that may affect their ability to work in a particular clinical staff position.

#### C. CLINICALTRAVEL EXPENSE

The travel vehicle and cost of transportation to geographically dispersed clinical education settings are the sole financial responsibility of students

#### D. ATTENDANCE POLICY

Employers want dependable and punctual employees; therefore, the program has a strict attendance policy. There will be no makeup of seat time allowed that counts towards the 5 days of absences allowed during fall and spring semesters, or 3 days of absences allowed in the summer semester. Attendance = 40% of clinical grades. For detailed program attendance information, please see the Radiologic Technology Program Handbook, II. Policies and Procedures, Radiologic Technology Attendance Policy.

#### **E. UNIFORM REQUIREMENTS / GROOMING POLICY**

The school class and clinical uniform consists of:

- Dark Gray scrub jacket
- · Dark Gray uniform pants
- Dark Gray or Teal V-neck scrub top
- Students are required to wear their uniform to class and clinical education settings daily.
- 1. Appropriate ID badge, both radiographic markers, and dosimeter must be always worn when in the clinical education setting.
  - Replacement of ID badge, radiographic markers and/or dosimeter (approximately \$25 to replace dosimeter) is the students'
    responsibility and student will be required to purchase any lost items.
  - Student must notify CU faculty immediately if during any time of clinical education, the student has lost/misplaced his/her radiographic markers, dosimeter, or ID badge.
  - Students coming to or at a clinical education setting without appropriate ID badge, both radiographic markers, appropriate clinical attire, and dosimeter will be dismissed from the clinical education setting to retrieve the missing items.
  - Student will be held accountable for the time missed and points will be deducted from student employability grade.
  - If a student does not notify CU faculty and continues to work without the missing items, the student will receive an absence and lose all employability grades for that day and subsequence clinical days until student has all required items to attend the clinical education training.
- 2. Students <u>are not allowed</u> to wear any other type of jackets during clinical rotations in lieu of scrub jackets. Student may wear appropriate undershirts, i.e., all solid white, black, or gray tee shirts or turtlenecks, if needed.
- 3. V-neck scrub tops (**Teal** or **Dark gray**) and uniform style pants (**Dark gray**) must be clean, in good shape and free of wrinkles. Scrub tops need to be worn with foundation garments. Dresses, stirrup style pants, denim or denim type pants, leggings, capris, or shorts are not allowed.
- 4. Shoes are to be sturdy athletic shoes that provide good support and are non-slip soles. Shoes and shoelaces must be always kept clean.
  - Canvas shoes such as Hey Dudes etc., Crocs, or mules are not permitted. Please see program faculty is you have questions.
- 5. Facial cosmetics should be worn with discretion. No perfumes and colognes. Duncan Regional Hospital has a scent-free policy.
- 6. Nails must be kept neat, trimmed, and clean always, and be in a working length. (Working length is defined by nail technicians as being approximately ¼ " in length from fingertips.)
  - Nail polish, gel, shellac, nail jewelry, decals and painted designs are not permissible.
  - Artificial nails will not be worn. (Artificial nails are defined as substances or devices applied to the natural nails to augment or enhance the nails.) These artificial applications include, but are not limited to dipped, bonding, tips, wrappings, and tapes.
- 7. Good personal hygiene must be always maintained. A daily shower/bath, brushing of teeth & use of deodorant is required.
  - Special care must be taken to prevent halitosis.
- 8. Hair must be clean, neat, brushed and worn off the face. If hair touches the shoulders, it must be pulled back, off the shoulders and away from the face. If hair does not touch the shoulders but is long enough in front to cover facial area while interacting with patients, front of hair must by pulled/pinned back away from face.
  - All beards must be always kept neat and clean, close shaven and trimmed and ¾ inch in length or less. Growing beards must be started on long school breaks or vacations and must be filled in before going to Clinical Education Setting, (i.e., no stubble, etc.)
- 9. Jewelry: Wristwatches may be worn at any time. One ring may be worn at your own risk. Lanyards may be worn, but must be the breakaway style, for safety purposes. No other jewelry is allowed, including earrings in cartilage. Any body piercing that is visible is <u>not</u> <u>allowed</u>, i.e., nose, eyebrows, mouth (inside and out), and face or lips.
- 10. Tattoos that are visible will need to be covered per induvial clinical education setting policy.

Any questions regarding the school class and clinical uniform requirements must be discussed with the CU Program Faculty.

## VII. RADIATION AND GENERAL SAFETY POLICIES IN CLINICAL SETTINGS' ENERGIZED ROOMS

#### These practices assure radiation exposures are kept as low as reasonably achievable (ALARA).

- A. The program will assure instruction of students in the utilization of imaging equipment, accessories, optimal exposure factors, and proper patient positioning to minimize radiation exposure to patients, selves, and others. Radiation policies will ensure that occupational radiation exposures to faculty and students engaged in the use of radioactive equipment are kept As Low As Reasonably Achievable.
  - Program students will be exposed to ionizing radiation within the clinical education settings when performing radiologic examinations, which can mutate biologic human cells and be harmful to an unborn fetus.
  - Students will understand basic radiation safety practices within the school's imaging suites and prior to assignment to clinical settings.
  - Students must not hold image receptors during any radiographic procedure. Students must not hold phantoms during any radiographic procedure within the school's imaging suites. Students should not hold patients during any radiographic procedure when an immobilization method is the appropriate standard of care.
  - Student must be under the supervision of a qualified radiographer who is readily available when utilizing the school's imaging suites or when competent in the clinical education setting.
  - Detailed Radiation Protection and Monitoring/Exposure Practices and Policies will be covered upon entrance to the program in August of each year and prior to clinical training.
- **B.** The radiation machines in the clinical settings meet specific radiation control requirements and each Imaging Suite is registered with the state and the certificate is posted within the Laboratory. Compliance with any conditions or restrictions on that certificate is required. X-ray equipment is installed following the manufacturer's specifications. No alterations, tampering with, or removing of any of the filters, or collimators, or in any way causing needless radiation exposure is permitted.
- **C.** All clinical settings, CU faculty, and student operators of the radiology machines are responsible for radiation safety, and all are required to know the radiology procedures including the proper demonstration of the use of the x-ray machines safely and correctly. Students will obtain Radiographic Equipment/Radiographic Computer Applications competency in each clinical education setting, prior to operating imaging equipment on patients.
- D. Each person utilizing the imaging equipment in clinical settings must be an ARRT certified in radiography technologist or as in the case of students, must complete the basic radiation safety practices curriculum contained within the Introduction to Radiological Sciences & Health Care course prior to performing exposure examinations and work under the supervision of an ARRT qualified radiographer (CU Program Faculty or clinical education setting clinical instructors/staff).
- E. The Direct/Indirect/Repeat Supervision Policies will apply to all students during their clinical training at assigned clinical settings and Supervision for Students Flyers are posted at all clinical education settings to serve as a reminder of established Supervision Policies of CU for students.
- **F.** The clinical setting radiographers, CU program faculty, and students are responsible for personnel who enter the energized rooms at all times and therefore those rooms will be used only with permission by the clinical education setting.
- **G.** Clinical setting radiographers, CU Faculty, and students shall practice all standard radiation safety practices while operating imaging equipment.
- H. All clinical setting radiographers, CU program faculty, and students are required to wear their assigned radiation monitoring dosimeters at times while in the energized rooms and is to be worn at the collar, on the outside of any radiation protective devices
- I. Clinical setting energized room doors will be closed prior to making any exposure.
- J. Faculty and students are forbidden to remain within the clinical setting energized rooms while an exposure is being made without justifiable cause as is the case with portables, fluoroscopy exams, etc., and are required to be shielded or stand behind a barrier wall when making exposures.
- **K.** The clinical setting energized rooms are equipped with safety kill/stop switches of power to prevent undue radiation exposure or electrical accidents that could cause injury.
- L. To ensure the protection of all personnel, program faculty and students will adhere to the "No Hold Policy" which states:
  - Radiologic students must not hold image receptors during any radiographic procedure.
  - Radiologic students should not hold patients during any radiographic procedure when an immobilization method is the appropriate standard of care.
  - The following are suggestions to help adhere to the "no hold policy":
  - Using family/friend or general public would be a better choice Using Immobilization devices, i.e., image receptor holder, sandbags, sheet immobilizers, tape, pigg-o-stat. or other commercial immobilizers would be the best choice
- M. Energized imaging equipment within the clinical setting may not be used to expose family, friends, radiographers, or other students without a doctor's order.
- N. Clinical setting clinical preceptors/staff, CU faculty, and students must follow all applicable OSHA guidelines in the laboratory setting.
- **0.** Safety Data Sheets (SDS) for processing chemicals and any other materials encountered within the clinical education settings are stored within that facility for clinical preceptors/staff, CU faculty and student referral in case of an exposure.

- P. Basic safety rules apply when utilizing imaging equipment at clinical education settings to enhance learning and minimize possible injury to clinical instructors/staff, patients, students, CU faculty or others include:
  - a. No use of profanity or unprofessional vocabulary
  - **b.** No food or drink containers allowed in the energized rooms
  - c. When positioning patients onto a wheelchair, gurney, or radiographic table, demonstrate lifting and transfer techniques using proper body mechanics
  - d. Return all patients to the correct waiting areas or rooms when finishedHandle cassettes, CR cassettes, DR cassettes, QC instruments and patient with utmost care
  - e. Clean and always maintain a sanitary work area
  - f. Use good hand hygiene before positioning patients and performing radiologic exams
  - g. Wear personal protective equipment when following standard precautions
  - h. Utilize eye wash station available when warranted
  - i. Discard sharps into a sharp's container immediately after use
  - j. Report any electrical equipment damage and correct problems related to electrical safety
- Q. Exit Signs are appropriately posted within the clinical education setting and followed, if needed.
- R. Fire extinguishers are located within the clinical education settings for use in case of a fire.
- 5. Phones are placed within the clinical settings to report fires, accidents or codes that may occur during students' training.

#### RADIATION PROTECTION MONITORING/EXPOSURE POLICIES

The radiation protection monitoring policy for the Radiologic Technology program is following Nuclear Regulatory Commission and State laws for radiation control, to minimize radiation exposure of personnel and patients without sacrificing diagnostic quality and students' radiation exposure is kept As Low As Reasonably Achievable (ALARA).

Students will wear Instadose dosimeters in lab and in the Clinical Settings, at all times for program related activities, with the dosimeter purchased through and maintained by the Radiologic Technology Program Radiation Officer. If the student does not have their dosimeter at the Clinical Setting, or during laboratory assignments, the student will be sent home to obtain dosimeter and that time missed will be reflected against attendance and/or employability grade.

The faculty and students wear the same dosimeter at all clinical education settings and on campus in lab during the scheduled month to obtain a reading.

Students' Radiation reports are kept on file at in the Radiation Safety Officer's Office and posted in the Imaging Suites Radiology Lab. Students and Faculty will review and initial by their name for proof of documentation that students and faculty reviewed their radiation monitoring reports monthly. Radiation levels in excess of ¼ EfD per quarter require additional monitoring according to Federal regulations. If a student or faculty member's dosimeter reads more than ¼ EfD in a quarter, an additional dosimeter will be issued to monitor student or faculty.

#### The occupational dose equivalent limits for adults are:

#### **Annual Limit:**

- Total effective dose equivalent being equal to 50 mSv (5 rem).
- The sum of the deep dose equivalent and the committed dose equivalent to any individual organ or tissue other than the lens of the eye being equal to 0.5 Sv (50 rem).

#### Annual Limit to the lens of the eye, skin, and extremities are:

- Eye dose equivalent of 150 mSv (15 rem).
- Shallow dose equivalent of 500 mSv (50 rem) to the skin or any extremity.
- Formal written counseling of students and faculty of Radiologic Technology includes reviewing guidelines that are set at dosimeter reports more than 1/10 EfD. Review is conducted quarterly by the Radiation Safety Committee/Radiologic Technology Staff, the Radiation Safety Officer/Program Director, and the Radiation Medical Physicist.
- 2. When a student or faculty member receives 30 mrem or more during a one-month period, according to dosimeter reading, that individual will receive a formal written counsel reminding them that the Radiologic Technology Program safeguards the health and safety of students and faculty associated with education activities through implementation of published policies and procedures that are following Nuclear Regulatory Commission regulations and state laws as applicable.
  - a. The program will also counsel the student or faculty in basic radiation safety practices of time, distance, shielding and the utilization of grid holders, sponges, sandbags, and restraints to help minimize radiation exposure to patients, others, and themselves
  - b. The program will also review what type of exams were conducted during the clinical education setting experience and to what extent the student or faculty participated and how to minimize radiation exposure to themselves.
  - c. A Radiation Safety Practices power point will also be reviewed by the Radiation Safety Officer/Program Director and the individual, and a follow-up date will be established to review future dosimetry reports to assure that the student or faculty has taken positive steps and actions to adhere to radiation safety guidelines and to minimize radiation exposure to patients, others, and themselves.
  - Students will not be permitted to wear Radiologic Technology Program dosimeters when employed by Clinical Education Settings or non-CU Clinical Education Settings.

Students are required to attend orientation at each clinical setting that CU Radiologic Technology Program students attend to gain clinical training experience and is scheduled by the CU's clinical coordinator or designee with the clinical education setting's Education or HR department. The orientations are conducted prior to students scheduled for clinical training rotations.

The orientations conducted by the clinical setting personnel address policies and procedures relevant to that institution and address at a minimum, hazards relating to fire, electrical, chemical, emergency preparedness, medical emergencies, HIPAA, and Standard Precautions. Orientation outlines of exhibits, curriculum outlines, or printed list of students attended with date is copied and kept within each student's clinical file at Radiologic Technology campus.

The student may be asked to contact his/her physician regarding appropriate measures to be taken in the event of exposure to infectious and communicable disease in the Clinical Education Setting, when deemed advisable by the faculty.

Students are required to adhere to standard precautions pertaining to safety and personal protective equipment. Students are required to utilize personal protective equipment i.e., mask, gloves, gowns etc., and radiation protection equipment, lead aprons or gloves, when applicable. (i.e., exposure to blood and body fluids and radiation exposure).

#### **CLINICAL SETTINGS**

- 1. All clinical facilities require that students be free of any communicable diseases and may require all employees, volunteers, students, and contract personnel at their facilities to receive certain immunizations/vaccinations regarding pandemics or policies, with no exemptions. (Please keep in mind that these policies are imposed by the hospitals/clinics; they are not a Cameron University or program mandate, and we are required to complete specific clinical time and have no alternative sites to use for some required competencies.).
- 2. Students in the clinical area will abide by the policies of the facility regarding illness. The instructor should be notified if a student becomes ill, while on clinical duty.
- **3.** A student who incurs an injury or has an exposure due to contact with bloodborne pathogens, through body fluids, mucous membranes, or infectious needle sticks, will contact their instructor immediately.
- 4. The Clinical Setting will make available emergency medical care to Cameron University students and faculty members who may be injured while at the hospital. The term "injury" includes physical injury and injury due to contact with blood borne pathogens, body fluids, or communicable diseases through mucus membranes or via infectious needle sticks. The cost of such treatment is the responsibility of the student or faculty member.
- 5. Incident Reports at Clinical Settings must be filled out within 24 hours post-injury, and student must notify the Clinical Education Setting's clinical preceptor and Radiologic Technology Clinical Coordinator. (If copy of Clinical Setting Incident Report is put in student file, CU/ GPTC Incident Report is not necessary.)
- 6. Students are required to maintain current records of immunizations/vaccinations, original PPD, Hepatitis B vaccine, other immunizations/vaccines required by clinical education settings, and Healthcare Provider CPR throughout the 22-months of training. It is the students' responsibility to submit copies of these records to program, to be kept in the students' file. If the students' immunizations/vaccinations, PPD, Hepatitis B vaccine, and/or CPR are not current during the 22-months of training, the student will not be allowed to go to the clinical site which may result in dismissal from the program. Costs for immunizations, vaccinations, PPD, Hepatitis B vaccine, and CPR are the student's responsibility. Radiologic Technology may require Titers to prove immunity for MMR, Varicella, and Hepatitis B at some clinical sites.

NOTE: Noncompliance of proper documentation will result with the student being marked absent for clinical days missed, until records are brought up to date.

#### PREGNANCY POLICY

WARNING: If a student is pregnant, the Radiologic Technology Program advises the student that she may be subjected to radiation, which is harmful to the unborn fetus. The student is encouraged to notify the program faculty of pregnancy.

NOTE: This is a VOLUNTARY disclosure, and the student has the right to revoke declared pregnancy worker statement.

This notification must be made in writing and a signed statement of pregnancy kept in the student's file and sent to the Radiation Safety Officer. This will not alter clinical rotations based upon pregnancy.

• Upon Declaration of Pregnancy by student, the Radiation Safety Officer will order a fetal dosimeter to be worn at the student's waist under lead shields utilized and monitored on a monthly basis.

Options for Student Continuance: Provisions in an effort to assure radiation exposure to the student and fetus are kept as low as reasonably achievable. (ALARA)

- a. A pregnant student may choose to wait entrance prior to the start of program for the safety of herself and the unborn fetus.
  - The Radiologic Technology Program will hold a slot for the student in the following year's class.
- b. Continue in program with no revision of clinical practicum.
  - Special consideration is given upon request of a student due to exposure to ionizing radiation during pregnancy.
  - Because of the increased radiation sensitivity of the developing fetus, the National Council of Radiation Protection and the U.S. Nuclear

- Regulatory Commission recommends that "during the <u>entire gestation period</u>, the maximum permissible dose equivalent to the fetus from occupational exposures of the expectant mother should not exceed **0.5 rem**".
- Dosimetry reports are reviewed <u>each month</u> with the pregnant student to ensure fetal dosimeter occupational exposures, do not exceed .05 rem.
- c. Continue in program with revised clinical practicum to reduce radiation to student and fetus.
- d. Voluntarily withdraw from the program and continue 1 year later at the beginning of the semester of withdrawal.
- e. A private lactation room will be provided if needed.

#### **MRI SAFETY POLICY**

Magnetic Resonance Imaging (MRI) machines generate a very strong magnetic field within and surrounding the MR scanner. This magnetic field is always on and Unsecured. Magnetically susceptible (ferromagnetic) materials even at a distance can become accelerated into the bore of the magnet with force sufficient to cause serious injury or damage to equipment, patient, and any personnel in its path.

Therefore, great care is taken to prevent ferromagnetic objects from entering the MRI scanner room. It is the qualified MR personnel, especially the technologist's responsibility to control all access to the scanner room.

As a program student, you too become part of this team adhering and obligated to all MRI safety policies and procedures and will review an MRI Safety Video covering these safety policies and procedures prior to starting your clinical training.

- It is vital that you remove metallic objects before entering the MRI static magnetic field, including watches, jewelry, and items of clothing that have metallic threads or fasteners.
- If you have a bullet, shrapnel, similar metallic fragment in your body, body piercings, tattoos, or transdermal patches, there is a potential risk that it could change position, cause skin burns, and possibly causing injury.
- Also, the magnetic field of the scanner can damage an external hearing aid or cause a heart pacemaker to malfunction.
- History of any surgical procedure that entails implanted electronic device(s), or any implant within/on your body you were not naturally born with will
  need to be reviewed, through an MRI safety screening protocol that reflects current American College of Radiology (ACR) MRI safety guidelines, prior to
  clinical training.
- Detailed MRI Policies are covered in August of each year and prior to specialty rotations.
- An MRI Screening Protocol Form will be filled out & submitted for review prior to clinical training.
   Students are mandated to notify the program should their status change after filling out the MRI Screening Protocol Form.

## IX. CLINICAL EVALUATION POLICY

#### **EMPLOYABILITY GRADE (40% OF FINAL GRADE)**

- Daily points for each clinical day attended equals 20 points.
- Weekly grades will consist of the total 5 consecutive clinical days in session to equal 100 points.
- Student absence results in a "0" for that day's employability grade. -4 points will be deducted for each hour the student is tardy or absent, not to exceed 20 points per class.

#### PERFORMANCE GRADES (20% OF FINAL GRADE)

- Mandatory Clinical Competencies (Radiographic Procedure Exams outlined in Clinical Handbook)
- Radiographic Equipment Manipulation & Computer Application Competencies (Must be completed prior to obtaining an exam competency.)
- Semester II-V- All remaining diagnostic, mobile radiographic equipment & radiographic computer applications as student rotates to each clinical educational setting
- Clinical Experience Log

#### **CLINICAL GRADES (40% OF FINAL GRADE)**

- Clinical proficiency evaluations
- Simulated Lab Radiographic Procedure Exam Semester V
- Clinical performance evaluations

Clinical component of Semester I is incorporated within the Introduction to Radiologic Sciences and Health Care course reflected as a didactic grade outlined below: TEST GRADE (75% OF FINAL GRADE)

\*Mandatory Clinical Competencies - (ROUTINE CHEST\*-Standing (PA& LT Lat) & ABD.- KUB\* (Supine-AP))

Radiographic Equipment Manipulation & Computer Application Competencies (Must be completed prior to obtaining an exam competency.)

A = 93 - 100

B = 85 - 92

C = 78 - 84

D = 70 - 77

F = 69 and below

**NOTE:** Students must receive a minimum of a C or a 78% average to pass the Radiologic Technology courses except for the Radiologic Technology Seminar course, which must be a minimum of 80%. Students are required to have a 78% ending GPA in each course taught each semester to advance to the next semester of the program and 80% for the Radiologic Technology Seminar course to graduate the program.

- Clinical competencies must be maintained at 100% to pass levels for each Semester.
- If student does not maintain clinical competencies for the Semester they will be put on Clinical Probation, until competencies are
  reached in the next following Semester. Failure to meet the competency requirements at the end of the following Semester will
  result in student dismissal from the Radiography Technology program. (For probation specifics refer to Radiologic Technology
  Program Student Handbook)
- <u>Clinical probation</u> is in place to encourage students to seek extra help from the instructor to improve their grades. Extra credit work is used to provide the student knowledge of deficient concepts to raise the student's grade up to the required clinical standard of the 78% GPA.
  - o Extra credit work must be turned in within two weeks after the written clinical probation counsel, or student will forfeit all points available.
  - Extra credit work can only be given one time per semester per course with a 20-point maximum given to get the student back to a 78%
     GPA.
- Specific requirements discussed during a probation counseling session, will be given to the student in writing. The student will be solely
  responsible for contacting instructors, getting extra credit work, and verifying the period for improving their grade.
- Students will have access to their Clinical GPA throughout the semester online in blackboard or in program faculty's offices at the request of
  the student. Individual counsels may be conducted in reference to clinical grades and competencies obtained or lacking.
- At the end of the clinical probation period, students not meeting the minimum standards established in the written counseling may be recommended for dismissal from the program.

## X. ADVISEMENT PROCEDURES

- Students will have access to their academic GPA throughout courses taken that are posted online in Blackboard, which is available prior to taking the final exam in a course and throughout the semester or in program faculty's offices at the request of the student. Individual counsels may be conducted in reference to clinical grades, plus competencies obtained or lacking.
- Academic advisement is required if student's GPA falls below 78% the student is then placed on academic probation and given opportunity to
  complete remedial work and schedule tutoring from the Academic Center or individual instruction from program faculty.
- Clinical advisement is required to review Clinical Performance Evaluations and clinical competencies periodically with each student.
- Disciplinary advisement is conducted through the program faculty offices, depending upon where the unacceptable behavior took place. Certain behaviors are considered unacceptable and detrimental to the overall objectives of the program and are included within the Program Student and Clinical handbooks and student may first be given a verbal counseling and upon second committal of a second offense will be given a written counseling and may be considered for dismissal should the student commit a third offense or if warranted that the behavior was severe enough may be suspended up to 3 days or immediately dismissed upon the first offense, depending on the severity of unacceptable conduct or behavior. Please refer to the Standards of Conduct/Disciplinary Polies in the Program Student Handbook.

## XI. COMPLAINT POLICY/DUE PROCESS

It is essential that the program provide students, faculty, clinical staff, or institutional staff with an unbiased avenue to pursue complaints or grievances and the opportunity to be heard in a timely manner. The following outlines the steps for formal resolution of a grievance or complaint.

- 1. Inform the program director of grievance or complaint within 5 days of occurrence by submission of a written letter describing the grievance or complaint.
- 2. The program director will investigate the grievance or complaint within 5 days and will report the findings to the student/faculty/clinical staff/ institutional staff within 2 weeks, or a time agreed to by both parties with a written memorandum.
- 3. If the grievance or complaint is substantiated, a plan for improvement will be implemented and will be included in the written memorandum.
- 4. In the event the student/faculty/clinical staff/institutional staff does not feel that the complaint or grievance has been resolved they should refer to the Cameron University Student Handbook under Grievance Procedure and follow the procedures outlined.

• For complaints based upon discrimination, sexual harassment, sexual assault, consensual sexual relationships, retaliation, or racial and ethnic harassment see below:

#### 1.0 Who May Use Procedure

1.1 The grievance procedure embodied herein shall be available to any person who, at the time of the acts complained of, was employed by, or was enrolled as a student at Cameron University.

#### 2.0 Filing of Complaint

- 2.1 Acceptance of Procedure Conditions. Complainants who exercise the right to use this procedure agree to accept its conditions as outlined. A grievance filed under this procedure normally may not be filed under any other University grievance procedure.

  Depending upon the nature of the issues involved, the complainant will be advised by the EO Office or his/her designee about the appropriate procedure(s) to utilize.
- 2.2 Equal Opportunity Officer. Persons who have complaints alleging discrimination based upon race, color, national origin, sex, age, religion, disability or status as a veteran or complaints alleging sexual harassment, consensual sexual relationships, retaliation, or racial and ethnic harassment may file them in writing with the EO Officer, also referred to as EO Officer, or with their department head/chair, academic dean, or administrative supervisor. These individuals and the EO Officer or the EO Officer designee are referred to as "Administrator."
- 2.3 Multiple Issues. Where multiple issues exist, (i.e., sexual harassment and violation of due process or grade appeal), the complainant must specify all grounds of which the complainant should have reasonably known at the time of filing.

#### 3.0 Timing of Complaint

3.1 Any complaint must be filed with the EO Officer or other appropriate administrator within 180 calendar days of the act of alleged discrimination or harassment. All other time periods may be reasonably extended by the administrator.

#### 4.0 Withdrawal of Complaint

4.1 The complainant may withdraw the complaint at any point during the investigation or prior to the adjournment of a formal hearing

#### 5.0 Confidentiality

- 5.1 Proceedings. Investigators and members of the Hearing Panel are individually charged to preserve confidentiality with respect to any matter investigated or heard. A breach of the duty to preserve confidentiality is considered a serious offense and will subject the offender to appropriate disciplinary action. Parties and witnesses also are admonished to maintain confidentiality with regard to these proceedings.
- 5.2 Records. Upon disposition of a complaint, all records involving discrimination or harassment shall be transmitted to and maintained by the EO Officer as confidential records except to the extent disclosure is required by law. This includes records of complaints handled by administrators.

#### 6.0 Administrative Action

- 6.1 Unilateral Action. The University recognizes its obligation to address incidents of discrimination and harassment on campus when it becomes aware of such incidents even if no complaints are filed, and the University reserves the right to take appropriate action unilaterally under this procedure.
- 6.2 Students. With respect to students, the Director of Student Development or other appropriate persons in authority may take immediate administrative or disciplinary action which is deemed necessary for the welfare or safety of the University Community. Any student so affected must be granted due process including a proper hearing. Any hearing involving disciplinary suspension or expulsion shall be conducted by the Office of Student Development, in accordance with the principles set forth in the Cameron University Code of Student Conduct, as the same may be amended from time to time. Lesser administrative or disciplinary action may be appealed to the Dean of Student Services. Such requests must be in writing and filed within seven calendar days following the summary action. Appeals will be conducted in the manner set forth under "Appeals and Review" in the Code of Student Conduct.
- 6.3 Personnel. With respect to employees, upon a determination at any stage in the investigation or grievance procedure that the continued performance of either party's regular duties or University responsibilities would be inappropriate, the proper executive officer may suspend or reassign duties or responsibilities or place either party on leave of absence pending the completion of the investigation or grievance procedure.

#### 7.0 Proceedings

- 7.1 Investigation. Upon receipt of a complaint, the EO Officer or other appropriate administrator is empowered to investigate the charge to interview the parties and others, and to gather any pertinent evidence. The investigation should be completed within 60 calendar days of receipt of the complaint, or as soon as practical. If a time period is extended for more than 10 calendar days, the EO Officer will provide written or oral notice of reason for extension to all parties involved. The investigator shall prepare a record of the investigation. In arriving at a determination of a policy violation at any stage of the proceedings, the evidence as a whole and the totality of the circumstances and the context in which the alleged incident(s) occurred shall be considered. The determination will be made from the facts on a case-by-case basis.
- 7.2 Completion of Investigation. Upon completion of the investigation the EO Officer or other administrator is authorized to take the following actions:
  - 7.2.1 Satisfactory Resolution. The matter may be resolved to the satisfaction of the University and both the complainant and the respondent. If a resolution satisfactory to the University and both parties is reached through the efforts of the EO Officer or other administrator, the administrator shall prepare a written statement indicating the resolution. At that time, the investigation and the

- record thereof shall be closed.
- 7.2.2 Dismissal. If it is determined that no policy violation occurred, the complaint will be dismissed. Notice of dismissal will be given in writing to each party involved.
- 7.2.3 Determination of Impropriety. If the investigator determines an impropriety has occurred, both parties will be notified of the finding of Impropriety and of the action to be taken.
- 7.2.4 Actions Regarding Faculty. In the case of a complaint against a faculty member, the administrative investigator may determine that the evidence is sufficiently clear and serious so as to warrant the immediate commencement of formal proceedings as provided in the Abrogation of Tenure, Dismissal Before Expiration of a Term Appointment, and Severe Sanctions sections of the Faculty Handbook. If the Vice President for Academic Affairs and the President concur with the administrator's finding, the case may be removed at the option of the accused from the grievance proceedings contained herein and further action in the case shall be governed by the Abrogation of Tenure, Dismissal Before Expiration of a Term Appointment, and Severe Sanctions section in the Faculty Handbook. Otherwise, this policy and procedure shall apply.
- 7.3 Appeals. In the event of either dismissal or determination of impropriety, as described in Sections 7.2.2 or 7.2.3, either party may lodge an appeal. An appeal must be filed with the EO officer in writing within 15 calendar days of the date of the notice of dismissal. The appeal must request a hearing according to the provisions of Section 8 of this procedure. Unless an appeal is filed within the 15-calendar day period, the case will be considered closed.

#### 8.0 Hearing

- 8.1 Request for a Hearing. Appeals and complaints unresolved following an investigation may result in a hearing before a hearing panel selected from the membership of the Committee on Discrimination and Harassment as described below. Faculty versus faculty grievances with multiple issues will be heard by a Faculty Appeals Board. The request for a hearing must be in writing and filed with the EO Officer.
- 8.1.1 Form of Request. The request for a hearing must contain the particular facts upon which the policy violation allegation is based as well as the identity of the appropriate respondent(s). A notice of the request and a copy of the request shall be given to the proper respondent(s) by the EO Officer.
- 8.1.2 Accused Party Response to Request. Written response to the request for a formal hearing must be sent to the EO Officer within 10 calendar days of the date of the notice that a formal hearing has been requested. A copy of the response shall be given to the party requesting the hearing.
- 8.2 Selection of a Hearing Panel. Within 10 calendar days following receipt of the written request for a hearing, the EO Officer shall initiate the process to determine the members of the Hearing Panel who are to conduct a hearing. A five-member hearing panel will be chosen by the parties to the complaint from the twenty-four (24) member Committee on Discrimination and Harassment/Faculty Appeals Board. A Committee on Discrimination and Harassment shall be established on campus and composed of eight (8) staff members, eight (8) students, and eight (8) faculty members. Five (5) staff members will be appointed by the Vice President for Business and Finance; five (5) students will be appointed by Student Government Association; and the President will appoint three (3) staff and three (3) students. All faculty members will be appointed by the Faculty Council. The terms of appointment shall be for three (3) years with initial terms of 1, 2, and 3 years in each category to provide the staggered membership, except that each student shall be appointed for a one-year term. The selection process shall be in the following manner: the complainant and the respondent alternately select two names each from the pool. Those selected choose a fifth name from the pool to serve as chair. If the four panelists cannot agree on the fifth, the names of the five additional Committee members will be drawn by lottery. Each panelist will strike one name off the list of five names. The remaining person shall be the fifth panelist. Either Party to the complaint may ask the EO Officer to disqualify any member of the Hearing Panel upon a showing of cause. No panelist shall be expected to serve if he/she feels that a conflict of interest exists. Replacements shall be selected in the same manner as the original panel.
- 8.3 Pre-Hearing Conference. Within 10 calendar days of receiving notification of selection, or as soon as practical, the Chair shall convene the Hearing Panel for an informal discussion of the grievance and a decision as to whether there exist adequate grounds for a hearing. The parties involved and the EO Officer shall be present during the informal discussion. Prior to the informal discussion, the EO Officer shall conduct an orientation. Each panel member shall be given a copy of the written complaint, the request for a hearing, and the written response. No witnesses or evidence will be heard.
- Advisers and Attorneys. At all meetings, each party may be accompanied by an adviser. If a party chooses to be advised by an attorney, he/she may do so at his/her expense. If an adviser is used, the name of the person so assisting must be furnished to the EO and the other party 10 calendar days in advance of the pre-hearing conference. The EO will forward the name of the person to the Hearing Panel. Advisers may advise their clients at the pre-hearing conference but may not directly address the Hearing Panel. If the Panel decides at its pre-hearing conference that there is no basis for a hearing, it shall report the determination in writing to the proper Executive Officer with a copy to the President and the EO Officer. The Executive Officer shall render his or her decision on the matter in writing to each of the parties involved in the informal proceedings. After the pre-hearing conference, if a party wishes to have an adviser present at any stage of a hearing, he/she must notify the Hearing Panel Chair and other party(ies) of the name of the adviser at least 10 calendar days in advance of the scheduled hearing. Advisers may advise their clients at the hearing but may not directly address the Hearing Panel or witnesses, except as required for student disciplinary hearings leading to suspension or expulsion.
- 8.5 Hearing Guidelines. The panel shall be convened by the EO Officer for further orientation prior to the formal hearing. Each panel member shall be given a copy of the Hearing Guidelines. The hearing panel procedures in conducting a hearing shall be established with reference to the Hearing Guidelines and shall provide that the parties may present all of the evidence that they consider germane to the determination. The parties also may call witnesses to testify and may cross-examine witnesses called by

- the other party. The hearing shall be closed unless all principals in the case agree to an open hearing. Audio tape recordings of the proceedings shall be arranged by the Chair of the Hearing Panel and paid for by the University. Transcripts may be charged to the requesting party.
- 8.6 Notice and Scheduling. The Chair of the Hearing Panel shall notify the parties of the dates, times and locations of hearings and meetings. Parties are responsible for notifying their witnesses. Hearings shall be scheduled to reasonably ensure that the complainant, respondent, and essential witnesses are able to participate. Upon request Legal Counsel may serve as an adviser to the Hearing Panel.

#### 9.0 Conclusion of Proceedings

- 9.1 Satisfactory Resolution Prior to Hearing Completion. In the event the matter is resolved to the satisfaction of all parties prior to completion of the hearing, a written statement shall indicate the agreement recommended by the parties and shall be signed and dated by each party and by the Chair of the Hearing Panel. The recommendation will be referred to the appropriate Executive Officer for final determination.
- 9.2 Panel's Findings and Recommendations. In the event a solution satisfactory to the parties is not reached prior to the completion of the hearing, the Panel shall make its findings and recommendations known to the proper Executive Officer, with copies to the President of the University and the EO Officer. The Panel's report, with its findings and recommendations, shall be prepared and properly transmitted within seven (7) calendar days after conclusion of the hearing.
- 9.3 Executive Officer's Decision. Within fifteen (15) calendar days of receipt of the Hearing Panel's findings and recommendations, the proper Executive Officer shall inform the complainant and the respondent of the findings of the Hearing Panel and the Officer's decision. A copy of the Officer's decision shall be transmitted to the Chair of the Hearing Panel, with copies to the President of the University and the EO Officer. In a case investigated initially by an administrator, the administrator also shall be informed of the Officer's decision. In the event the allegations are not substantiated, reasonable steps in consultation with the accused may be taken to restore that person's reputation.
- 9.4 Appeal to the President. A party may appeal the decision of the Executive Officer by filing a written notice of appeal with the President within 15 calendar days after the party receives notice of prospective action or of action taken, whichever is earlier. If the President does not act to change the decision of the Executive Officer within 15 calendar days of receiving the appeal, the decision of the Executive Officer shall become final under the executive authority of the President.

### XII. CHANGES IN POLICIES

The program director and/or faculty will notify students of changes in policies by documentation with memorandums. Students are required to sign the memorandums to demonstrate acknowledgment of change in policy.

## XIII. JRCERT NON-COMPLIANCE COMPLAINT POLICY/DUE PROCESS

It is essential that the program of Radiologic Technology provide students, faculty, clinical preceptors/clinical staff, or institutional staff with an unbiased avenue to pursue complaints or grievances regarding allegations of non-compliance of JRCERT standards and the opportunity to be heard in a timely manner. These standards are reviewed in the Radiologic Technology curriculum course: Introduction to Radiologic Sciences & Health Care and are available for review at www.jrcert.org. The following outlines the steps for formal resolution of a grievance or complaint regarding allegations of non-compliance of JRCERT standards.

- 1. the program director of grievance or complaint regarding allegations of non-compliance of JRCERT standards within 5 days of occurrence by submission of a written letter describing the allegations of non-compliance of JRCERT standards.
- program director will investigate the allegations of non-compliance of JRCERT standards within 5 days and will report the
  findings to the student/faculty/clinical preceptors/clinical staff/institutional staff within 2 weeks, or a time agreed to by both
  parties, with a written memorandum. In the event that the allegation is substantiated, a plan for improvement will be
  implemented and will be included in the written memorandum.
- 3. the event the student/faculty/clinical preceptors/clinical staff/institutional staff does not feel that the complaint or grievance regarding allegations of non-compliance of JRCERT standards has been resolved, they should refer to the CU Student Handbook under Grievance Procedure and follow the procedures outlined.

#### **Process for JRCERT Submission**

- Before submitting allegations, the individual must first attempt to resolve the complaint directly with program/institution officials by
  following the due process or grievance procedures provided by the program/institution. Each program/institution is required to
  publish its internal complaint procedure in an information document such as a catalog or student handbook.
- 2. If the individual is unable to resolve the complaint with program/institution officials or believes that the concerns have not been properly addressed, he or she may submit allegations of non-compliance to the JRCERT:

\*Chief Executive Officer Joint Review Committee On Education in Radiologic Technology 20 North Wacker Drive, Suite 2850 Chicago, Illinois 60606-3182

Phone: (312) 704-5300

Fax: (312) 704-5304 E-mail: mail@jrcert.org

- 3. The Allegations Reporting Form must be completed and sent to the above address with required supporting materials and is found on the website: www.jrcert.org under Accreditation Forms and Checklists.
- 4. Forms submitted without a signature, or the required supporting material will not be considered.
- 5. If a complainant fails to submit appropriate materials as requested, the complaint will be closed.

The Federal Higher Education Act of 1965, as amended, provides that a student, graduate, faculty, or any other individual who believes he or she has been aggrieved by an educational program or institution has the right to submit documented allegation(s) to the agency accrediting the institution or program.

The JRCERT, recognized by the United States Department of Education for the accreditation of radiography, radiation therapy, magnetic resonance, and medical dosimetry educational programs investigates allegation(s) submitted, in writing, signed by any individual with reason to believe that an accredited program has acted contrary to the relevant accreditation standards or that conditions at the program appear to jeopardize the quality of instruction or the general welfare of its students.

Cameron University RadiologicTechnology will decide the final outcome of any and all allegations/complaints submitted to the program.

## XIV. CLINICAL SETTING EVALUATION INSTRUMENTS

#### A. RADIOGRAPHY EQUIPMENT COMPETENCY EVALUATION

**Primary Objective:** The student will demonstrate a working knowledge of each control on all radiographic consoles utilized in the clinical setting. The student must prove competency in equipment manipulation before attempting to complete any clinical procedure competencies.

Digital/Computed Radiography Room - The student demonstrated the location and proper use of:

- 1. Radiographic Table The student successfully demonstrated location and proper use of:
  - a. Tabletop movement and bucky tray locks.
  - b. Placing cassette in the bucky tray.
  - c. Side rail accessories to include the footrest, hand grips, compression shoulder rests, lateral cassette holder, and/or patient cradle.
  - d. Horizontal stop.
  - e. Emergency shut off.
  - f. Vertical movement of table.
- 2. X-ray Tube The student successfully demonstrated location and proper use of:
  - a. Warming up the x-ray tube.
  - b. Movement of x-ray tube in all directions.
  - c. Centered x-ray tube to the table / bucky.
  - $d. \ \ Collimator \ light \ switch, \ override \ switch, \ diaphragm \ controls, \ and \ scales.$
  - e. Scales relating to tube position.
  - f. Selection of kVp and mAs.
  - g. Calibrate detector.
  - h. Grid removal.
  - i. Proper removal and installation of battery image receptor.
  - j. Proper utilization of tracking device.
- 3. Vertical Bucky and Chest Stand The student successfully demonstrated location and proper use of:
  - a. Upright table / bucky movement in all directions to include rotation, angulation, vertical and horizontal placement.
  - b. All locks and scales associated with movement of upright bucky.
  - $c. \ \ \mbox{Adjustment of cassette holder for all cassette sizes}.$
  - d. Procedure for placing cassettes in the bucky tray.
  - e. Handgrip adjustment.
- 4. X-ray Control Panel (generator) The student successfully demonstrated location and proper use of:
  - a.  $\,$  kVp, mA, mAs, and / or time selection controls.
  - b. Automatic exposure controls (i.e., ionization chamber/photocell placement and density settings).
  - c. Focal spot selection control.
  - d. Bucky selection (table / wall) controls.
  - e. Exposure switch.

- f. On / Off switch.
- g. Input of patient data.
- 5. Radiography Workstation The student demonstrated location and proper use of:
  - a. Logon to the DR system.
  - b. Enter patient information Patient name, MR#, CI#, Gender, DOB, and send destination.
  - c. Locate patient on patient directory.
  - d. Modify Examination Tag selecting correct procedure protocol for facility.
  - e. Modify Region of Interest (ROI) on image.
  - f. Output Formatting/Processing collimation/masking.
  - g. Exam overlays (Exam markers) R/L, upright, decubitus, prone.
  - h. Accept/Reject images for diagnostic quality.
  - i. Query from patient history/pull up radiograph.

#### 6. Portable Radiographic Unit

- a. Source of power supply
- b. X-ray tube warm up.
- c. Collimator light switch, override switch, and diaphragm controls and scales.
- d. All locks and scales associated with movement of the x-ray tube.
- e. Tube movement in all directions, to include rotation, angulation, vertical, and horizontal placement.
- f. All controls / locks necessary to "drive" or maneuver the unit.
- g. kVp, mA, mAs, and / or time selection controls.
- h. Exposure switch

#### 7. C-Arm / Image Intensifier

- a. Source of power supply
- b. All locks and scales associated with movement of the x-ray tube.
- c. Tube movement in all directions to include rotation, angulation, vertical, and horizontal placement.
- d. All controls/locks necessary to "drive" or maneuver the unit.
- e. kVp, mA, mAs, and/or time selection controls.
- f. Exposure switch.
- g. Automatic exposure selection controls (i.e., ionization chamber/photocell placement and density settings).
- h. Focal spot selection control.
- i. Fluoroscopy controls.
- j. Fluoroscopic timer controls.
- $k. \ \ \hbox{Enter patient information}.$
- 1. Orientate anatomy/image intensifier.
- m. Save and print images.
- 8. Fluoro Tower/Image Intensifier The student successfully demonstrated location and proper use of:
  - a. Collimator controls.
  - b. Automatic Exposure Control (AEC).
  - c. Fluoroscopy exposure switch.
  - d. Tabletop movement and table tilt controls.
  - e. Compression control.
  - f. Hand grip.
  - $g. \;$  Centering and parking the spot film diaphragm.
  - h. Fluoroscopic timer controls.
  - i. Myelogram lock.
  - j. Remove/attach lead apron from fluoro tower.
- 9. Cassette Readers The student demonstrated the location and proper use of:
  - a. Turn on / off
  - b. Erase Cassettes
  - c. Remove cassette if stuck
  - d. Query from patient history / pull up radiograph

#### **B. CLINICAL COMPETENCY EVALUATION**

Prior to achieving clinical competency of an examination, the student must successfully complete lecture in classroom and laboratory instruction

**Objective:** Given a patient and the necessary radiographic equipment and supplies, the student will demonstrate having requisite or adequate ability or qualities to successfully complete a radiographic procedure exam from the required ARRT radiographic procedure exam competency list following the Clinical Competency Evaluation form.

To obtain competency and pass the performance test on a radiographic procedure exam, all performances must be marked passed on the Clinical Competency Evaluation Form. These guidelines have been established by the American Registry of Radiologic Technologists (ARRT) criteria for radiography national certification and the Joint Review Commission of Education in Radiography Technology (JRCERT).

**Instructions to the Learner:** One of the tasks performed by the radiographer is the successful completion of established radiographic procedure exams on a patient in the clinical setting. This task is a combination of multiple performance skills in which you have been practicing, utilizing the radiographic procedure more independently as you complete the course of work and gain confidence under indirect supervision.

Learner must inform ARRT registered radiographer that the examination is being performed for competency prior to starting. The competency evaluation will begin when learner receives requisition for the examination.

**Instructions to the Evaluator:** Using the **Clinical Competency Evaluation** as a guide, determine the student's ability to complete a clinical radiographic procedure exam. Be sure to check each of the following performance skills and make an overall assessment of the student's ability. Use the following **RATING SCALE** for the performance test:

Passed - Excellent (Skilled, can perform task with no supervision- no mistakes).

Failed - Needs more assistance (Unable to perform this task).

Rate the student's ability to complete the clinical radiographic procedure exam. Upon completion of the student's performance, complete the overall assessment.

#### CRITERIA FOR CLINICAL COMPETENCY EVALUATION

Part I Evaluation Objective: Given a patient and the necessary radiographic equipment, the student will demonstrate the ability to:

- 1. **Evaluate requisition** verify procedure to be performed, patients name and age, and mode of transportation to the clinical area.
- 2. **Prepare radiographic room for exam** provide clean table, exhibit orderly cabinets and storage apace, have appropriate image receptor available, have all supplies necessary to perform exam readily available, turn machine "on" and be prepared for exposures, and turn tube in position necessary for the exam.
- 3. **Prepare patient for exam**-verify patient identification ensure patient is wearing proper attire for examination, assess patient to ensure all undesired external artifacts have been removed from the patient (i.e., necklaces, rings, watches, safety pins, etc.), and obtain patient history.
- 4. Obtain routine views- (All of the following must be performed to mark section as passed)
  - a) Select appropriated image receptor and placement.
  - b) Mark image receptor appropriately.
  - c) Select proper SID.
  - d) Proper tube-image receptor alignment.
  - e) Direct central ray to anatomic part.
  - f) Apply radiation protection devices.
  - g) Position patient for radiographic projections for exam.
  - h) Apply collimation.
  - i) Select adequate kVp and mAs using technique chart of select appropriate photocells for AEC
  - j) Instruct patient in breathing technique while observing patient during exposure.
  - k) Demonstrate ability to manipulate radiographic equipment. (i.e., table, x-ray tube, tomo unit, etc.)

Part II Evaluation Objective: Given a patient & the necessary radiographic equipment, the student will demonstrate the ability to produce and evaluate a radiographic image that demonstrates:

- 1. All anatomic parts included on radiographic images- for each radiographic projection required for the exam.
- **2.** No motion or removable artifacts.
- 3. Evidence of proper collimation.
- 4. Correct I.D. (i.e., patient name, date, and R or L marker)
- 5. Adequate radiographic contrast & brightness.
  - -Region of Interest (ROI) in the center of the anatomy.

Part III Evaluation Objective: The student will exhibit professional ethics and attitude by:

- 1. Respect for patient modesty-cover the patient with blanket, ensure patient is wearing gown properly.
- 2. Proper patient communication- explaining the examination to the patient, instilling confidence in the patient.
- 3. Applying patient comfort procedures- placing cushion under patient's knees when applicable, ensure patient is not cold, and allow patient to assume comfortable position while waiting for images to process.
- 4. Ability to adapt to new situations- body habitus, patient condition, equipment failure, and patient having reaction to contrast media.
- 5. Exhibits self-confidence to perform the exam.

#### C. SIMULATED RADIOGRAPHIC EXAMINATION

**Objective:** Demonstrate ability of having or manifesting the knowledge and experience needed for success in radiologic science profession.

Standard: The evaluator will rate the student's competencies according to the numbered rating scale.

Each Performance Objective is worth a total of 4 points.

Part I- Performance Objective: Given a patient and the necessary radiographic equipment, the student will demonstrate the ability to perform and evaluate technical application by:

- 1. Properly identify patient using two identifiers
- 2. Evaluate requisition and prepare radiographic room for exam
- 3. Prepare patient for exam
- 4. Appropriate image receptor placement
- 5. Mark the image receptor appropriately and be able to visualize it on image
- 6. Select proper SID / Tube image receptor alignment
- 7. Direct the central ray to the anatomic part
- 8. Apply radiation protection devices
- 9. Position the patient for the radiographic projection
- 10. Demonstrate technical needs by selecting the adequate technique
- 11. Instruct the patient in breathing technique while observing the patient during exposure
- 12. Demonstrates ability to manipulate radiographic equipment. (Table, tube, console, and workstation)

Part II- Performance Objective: Given a patient and the necessary radiographic equipment, the student will demonstrate the ability to produce and evaluate satisfactory radiographic image (s) for diagnostic quality that demonstrates:

- 1. All anatomic parts correctly positioned and included on image (s)
- 2. Markers visualized on image(s)
- 3. Evidence of proper collimation
- 4. Adequate radiographic exposure index.
- 5. Demonstrate critical thinking through analysis of images.

Part III- Performance Objective: The student will exhibit professional ethics and attitude by:

- 1. Respect for patient modesty
- 2. Proper patient communication
- 3. Applying patient comfort procedures
- 4. Ability to adapt to new situations
- 5. Adhere to proper scope of practice
- 6. Communicates effectively with healthcare professionals
- 7. Exhibiting the self-confidence to perform this examination
- 8. Accepting constructive criticism

#### **RATING SCALE**

4 = Excellent (no mistakes)
A 93-100
3 = Satisfactory (ten percent error)
B 85 - 92
2 = Below Satisfactory (fifty percent error)
C 78 - 84
1 = Needs more assistance
D 70 - 77
0 = Unsatisfactory (Needs immediate improvement) F 69 and below

(Students will score 80% or higher to demonstrate Critical Thinking & Clinical Competency)

#### D. LIMITED COMPUTED TOMOGRAPHY PERFORMANCE EVALUATION

**Objective:** Given a patient and the necessary computed tomography equipment and supplies, the student will demonstrate having requisite or adequate ability or qualities to successfully complete a limited computed tomography exam from the required ARRT radiographic procedure exam competency list following the Limited Computed Tomography Performance Evaluation Form.

To obtain competency and pass the performance test on a computed tomography procedure exam, all performances must be marked passed on the Limited Computed Tomography Performance Evaluation Form.

**Instructions to the Learner:** One of the tasks performed by the radiographer is the successful completion of established computed tomography procedure exams on a patient in the clinical setting. Passing this task will allow you to work more independently as you complete the course of work and gain confidence under indirect supervision.

Learner must inform ARRT registered radiographer that the examination is being performed for competency prior to starting. The competency evaluation will begin when learner receives requisition for the examination.

**Instructions to the Evaluator:** Using the **Limited Computed Tomography Performance Evaluation Form** as a guide, determine the student's ability to complete a computed tomography procedure exam. Be sure to check each of the following performance skills and make an overall assessment of the student's ability. Use the following **RATING SCALE** for the performance test:

Passed - Excellent (Skilled, can perform task with no supervision- no mistakes).

Failed - Needs more assistance (Unable to perform this task).

Rate the student's ability to complete the radiographic procedure exam listed above. Upon completion of the student's performance, complete the overall assessment.

Part I Evaluation Objective: Given a patient and the necessary computed tomography equipment, the student will demonstrate the ability to:

- 1. **Evaluate requisition** for procedure to be performed, patients name and age, and mode of transportation to the clinical area.
- 2. **Prepare computed tomography room for exam-** provide clean couch, exhibit orderly cabinets and storage space, have all supplies necessary to perform exam readily available, set-up injector, and in-put of patient data.
- 3. **Prepare patient for exam** ensure patient is wearing proper attire for examination, ensure all undesired external artifacts have been removed from the patient. (i.e., necklaces, rings, watches, safety pins, etc.)
- 4. Obtain routine views (All of the following must be performed to mark section as passed)
  - a) Obtained patient clinical history.
  - b) Positioned patient for exam.
  - c) Set scan parameters.
  - d) Advanced patient into gantry properly.
  - e) Followed scan protocol.
  - f) Send images to correct location (i.e., laser printer or physician).

Part II- Evaluation Objective: Given a patient & the necessary computed tomography equipment, the student will demonstrate the ability to produce a satisfactory image that demonstrates:

- 1. All anatomic parts included on images.
- 2. No motion or removable artifacts.
- 3. Adequate radiographic contrast & brightness windows.
- 4. Able to identify anatomy.

Part III- Evaluation Objective: The student will exhibit professional ethics and attitude by:

- 1. Respect for patient modesty-cover the patient with blanket, ensure patient is wearing gown properly.
- 2. Proper patient communication- explaining the examination to the patient, instilling confidence in the patient.
- 3. Applying patient comfort procedures- placing cushion under patient's knees when applicable, ensure patient is comfortable with room temperature.
- 4. Ability to adapt to new situations- body habitus, patient condition, equipment failure, and patient having reaction to contrast media.

#### E. CLINICAL PROFICIENCY EVALUATION

Cameron University faculty members will administer proficiency examinations on students throughout each semester on radiographic examinations the student has demonstrated competency in. Students are required to maintain an 80% for each proficiency evaluation given. A score of less than 80% on a proficiency evaluation is a failing grade. The faculty member has the authority to withdraw any competency in which the student fails proficiency. The student will be reevaluated by a faculty member to regain any competency that has been withdrawn due to a failing grade from a proficiency evaluation. Proficiency evaluations are counted as 40% of the student's clinical grade following the guidelines of the — Clinical Grading Standards.

The student will be given proficiency evaluations on the following radiographic procedures during each semester of the 22-months of training. Students will be evaluated for proficiency at least one time during semesters II - V. Clinical Proficiency Evaluations are part of 40% of the clinical grade. The radiographic procedures students are evaluated on are as follows:

#### PROFICIENCY EVALUATION SCHEDULE

#### Semester II

Chest/ Abdomen/ Upper Extremities

#### Semester III

Upper /Lower Extremities /Spine

#### Semester IV

Fluoroscopy Exams (Contrast Studies)/ Upper Extremities/Lower Extremities/ Spine

#### Semester V

Spine /Headwork/Any radiographic procedure the student demonstrated competency in.

#### CRITERIA FOR CLINICAL PROFICIENCY EVALUATIONS

**Objective:** Demonstrate ability of having or manifesting the knowledge and experience needed for success in Radiologic Science profession. Proficiency evaluations will be obtained from clinical competencies that the students have successfully attained. **Standard of Evaluation: The evaluator will rate the student's competencies according to the numbered rating scale.** 

• Each Performance Objective is worth a total of 4 points.

Part I- Performance Objective: Given a patient and the necessary radiographic equipment, the student will demonstrate the ability to perform and evaluate technical application by:

- 1. Properly identify patient using two identifiers.
- 2. Evaluate requisition and prepare radiographic room for exam
- 3. Prepare patient for exam
- 4. Select appropriate image receptor & placement
- 5. Mark the image receptor appropriately and be able to visualize it on radiograph
- 6. Select proper SID / Tube image receptor alignment
- 7. Direct the central ray to the anatomic part

- 8. Apply radiation protection devices
- 9. Position the patient for the radiographic projection
- 10. Demonstrate technical needs by selecting the adequate technique
- 11. Instruct the patient in breathing technique while observing the patient during exposure
- 12. Demonstrates ability to manipulate radiographic equipment. (Table, tube, console, & workstation)

Part II- Performance Objective: Given a patient and the necessary radiographic equipment, the student will demonstrate the ability to produce a satisfactory radiograph (s) and evaluate radiographic image(s) for diagnostic quality that demonstrates:

- 1. All anatomic parts correctly positioned and included on image(s)
- 2. Markers visualized on image (s)
- 3. Evidence of proper collimation
- 4. Adequate radiographic exposure index
- 5. Demonstrate critical thinking through analysis of images

Part III- Performance Objective: The student will exhibit professional ethics and attitude by:

- 1. Respect for patient modesty
- 2. Proper patient communication
- 3. Applying patient comfort procedures
- 4. Ability to adapt to new situations
- 5. Adhere to proper scope of practice
- 6. Communicates effectively with healthcare professionals
- 7. Exhibiting the self-confidence to perform this examination
- 8. constructive criticism

#### **RATING SCALE**

4 = Excellent (no mistakes)A= 93-1003 = Satisfactory (ten percent error)B= 85 - 922 = Below Satisfactory (fifty percent error)C= 78 - 841 = Needs more assistanceD= 70 - 77

0 = Unsatisfactory (Needs immediate improvement) F 69 and below

In the event a student receives a score below 80%, the student's competency will be pulled until the student is reevaluated on their competency of the exam.

(Semester II- IV: Students will score <u>80%</u> or higher to demonstrate Clinical Competency)

(Semester V: Students will score 85% or higher to demonstrate Clinical Competency)

#### F. CLINICAL PERFORMANCE EVALUATION

**Objective:** At the completion of each clinical rotation, the student will have required adequate abilities or qualities to successfully demonstrate clinical aptitude for their assigned rotation.

Instructions to the Learner: At the completion of each clinical rotation, the student will be evaluated by the ARRT registered radiographer with which he/she has worked with over the course of the rotation period, who can adequately assess the student's performance according to the evaluation criteria. Performance evaluations are counted as 20% of the student's clinical grade following the guidelines of the Radiologic Technology Program Handbook- Course of Study, Evaluation Policy, Clinical Learning Evaluation and Academic Policies.

Instructions to the Evaluator: The evaluator will rate the student's performance for the clinical rotation according to the criteria listed on the clinical performance evaluation. Mark the appropriate box with a check mark (2). Final score will be tallied by the clinical coordinator. Rating scale for the clinical performance evaluation is listed in Radiologic Technology Clinical Handbook.

**Standard:** Each criteria is worth a total of 5 points. Final score for the performance evaluation is compiled by adding the total points in each category from excellent to poor. That sum is then multiplied by a factor of 2 resulting in the final score for that clinical rotation.

5.0 = Excellent

4.5 = Above Average

4.0 = Average

3.5 = Below Average

3.0 = Poor

#### CRITERIA FOR CLINICAL PERFORMANCE EVALUATION

The evaluator will rate the students' performance for the clinical rotation according to the students' ability to demonstrate:

1. Patient Care

Convey confidence to patient. Demonstrates courtesy and empathy towards patient. Ability to establish and demonstrate concern, integrity, responsibility. Communicate effectively with the patient. Acquires patient history for each exam.

2. Professionalism, Appearance, and HIPAA-

Exhibits logical thought and good judgment in making decisions and recommendations. Demonstrates respect for patients. Wears clean uniform, pays attention to personal hygiene, and wears student I.D. badge and dosimeter. Students will demonstrate professional behavior in the clinical setting. Demonstrates knowledge of HIPAA requirements by adhering to patients' rights to privacy in clinical practice. Uses two identifiers when getting patient for exam.

#### 3. Organization-

Ability to evaluate needs to the technical situations of examinations. Demonstrates speed and accuracy in performing clinical duties.

4. **Quality of work** – Evidence of proper radiographic image quality, and absence of repeat radiographs due to inadequate preparation and thought.

#### 5. Ability to work and communicate with Peers and Clinical Staff

Communicates effectively with healthcare professionals. Considers the feelings and interests of co-workers and acceptance of supervision.

#### 6. Initiative and upkeep of room.-

Amount of motivation and enthusiasm, expressed by willingness to perform or assist technologist with radiographic examinations. Keeps assigned room neat, clean, and well stocked. Cleans after each examination.

#### 7. Punctuality and dependability -

Student arrives to assigned clinical area at all times including a.m., after breaks, p.m., after lunch, etc. Student attends clinical training for duration of rotation. Reliance on student to complete technical procedures started and to remain in assigned work area. Proper communication with supervising technologist regarding leaving work area for any reason.

#### 8. Attitude-

Demonstrates a cooperative courteous attitude toward clinical staff, fellow students, and hospital personnel. Shows receptivity to constructive criticism by applying new knowledge, exercises self-control, and demonstrates interest in clinical assignments.

#### 9. Technical application -

Degree to which the student applies knowledge of positioning and technique to the clinical situation and demonstrates knowledge of department routine examinations. Degree to which student can evaluate radiographs for quality and problem solve to achieve solutions.

#### 10. Critical Thinking -

Degree to which student is able to evaluate the technical situations of examinations.

## XV. SPECIALTY ROTATION

Students will be allowed to enhance professional development growth, if available, in Radiologic Technology by rotating through Computed Tomography and one additional rotation of the student's choice of the following specialty areas: Magnetic Resonance Imaging, Mammography / Bone Densitometry, Nuclear Medicine, Radiation Oncology, Ultrasonography, and Vascular Radiography (Cardiac Cath Lab). All categories will require direct supervision.

The program provides learning opportunities in current and developing imaging and/or technologies. Exposure to specialty areas of Radiologic Science is an opportunity for students to experience first-hand the operation of the equipment used and skills of the professionals within each modality. During rotation through any given specialty area, students are allowed the opportunity to gain limited hands-on training. Upon completion of any rotation through the above listed areas, students will be able to demonstrate their limited knowledge and acquired skill in the area of rotation through the specific criteria listed for each modality.

Regarding mammography the program must make every effort to place a male student in a mammography clinical rotation if requested; however, the program will not be expected to attempt to override clinical site policies that restrict mammography rotations to female students. Male students should be advised that placement in a mammography rotation is not guaranteed and, in fact, would be very unlikely. To deny mammography educational experience to female students, however, would place those students at a disadvantage in the workforce where there is a demand for appropriately educated professionals to address the needs of patients. It is noted that the same clinical site policies that are in place during the mammography educational rotations are most likely applicable upon employment, thus limiting access for males to pursue careers in mammography.

It is the responsibility of each clinical site to address any legal challenges related to the program's inability to place male students in a mammography rotation. All students should be informed and educated about the various employment opportunities and potential barriers that may affect their ability to work in a particular staff position.

#### **Primary Objective:**

Upon completion of a rotation through any specialty area, a technologist in that given modality will signify achievements of the student by initialing each accomplishment listed for that modality.

#### **Standard of Evaluation**

Please give an overall rating of the student based on their performance during this rotation according to the following rating scale.

#### **RATING SCALE**

3- LIMITED PRACTICE- has practiced job during training program, additional training is required to develop skill.

2- EXPOSURE ONLY -general information provided with minimal practice time, close supervision needed, and additional training required.

1- NO EXPOSURE- no information or practice provided during training program; complete training required.

#### A. MAGNETIC RESONANCE IMAGING - MRI

Upon completion of the student's rotation in MRI, the student will be able to demonstrate his or her understanding and knowledge in MRI procedures. A Limited Specialty Achievement has been attained when student is able to:

- 1. State examinations benefiting from MRI.
- 2. State methods in which images are recorded.
- 3. Describe briefly how the machine operates.
- 4. Prepare and position the patient for the procedure.
- 5. Set up the machine.
- 6. Perform an examination with supervision.
- 7. Identify cross-sectional anatomy.

#### **B. MAMMOGRAPHY/BONE DENSITOMETRY**

Upon completion of the student's rotation in Mammography/Bone Densitometry, the student will be able to demonstrate his or her understanding and knowledge in Mammography/Bone Densitometry procedures. A Limited Specialty Achievement has been attained when the student is able to:

#### **MAMMOGRAPHY**

- 1. Equipment
  - a. Breakers and control panel
    - i. Identify / operate main power switch and circuit breakers for control and machine.
    - ii. Identify / operate mAs, and kVp controls and photo time controls.
    - iii. Identify / operate exposure switch.
- 2. Radiographic Tube
  - a. Identify and operate all locks.
  - b. Identify and operate
    - i. Field light switches.
    - ii. Compression device.
    - iii. Release switch.
- 3. Radiographic table
  - a. Identify and operate Bucky tray and adapter.
  - b. Identify and operate compression paddle.
  - c. Identify and operate magnification system.
  - d. Identify and operate needle localization paddle.
- 4. Accessory equipment
  - a. Identify and demonstrate radiation protection and safety devices (i.e., lead aprons, gloves, gonadal shields, etc.)
  - b. Identify tower indicators.
- c. Identify and operate foot controls.

#### **BONE DENSITOMETRY**

- 1. Set up equipment for examination.
- 2. Prepare and position the patient for the procedure.
- 3. Perform an examination with supervision.

#### C. NUCLEAR MEDICINE

Upon completion of the student's rotation in nuclear medicine, the student will be able to demonstrate his or her knowledge and understanding of the basic concept of nuclear medicine. A Limited Specialty Achievement has been attained when the student is able to:

- 1. Prepare patient for exam and obtain medical history.
- 2. Demonstrate concepts of equipment setup.
- 3. Aid the technologists in obtaining patient data unique in nuclear medicine.
- 4. Understand the uses of pharmaceuticals used in nuclear medicine.

#### D. RADIATION ONCOLOGY

Upon completion of the student's rotation in oncology, the student will be able to demonstrate his or her knowledge and understanding of the basic concept of oncology. A Limited Specialty Achievement has been attained when the student is able to:

- 1. Describe and understand procedures involved with work up of patient for radiation treatments.
- 2. Linear Accelerator utilized and setup.
- 3. Aid doctor, nurse, and technologist in obtaining patient data unique for oncology.
- 4. State method in which radiation treatment is given.
- 5. Prepare and position the patient for the procedure.

#### **E. ULTRASONOGRAPHY**

Upon completion of the student's rotation in ultrasound, the student will be able to demonstrate his or her knowledge and understanding of ultrasonography and the multiple methods of application. A Limited Specialty Achievement has been attained when the student is able to:

- 1. Identify basic physics and its relationship to ultrasonography. (Optimizing exam data, transducer selections, etc.)
- 2. State patient prep requirements for various exams as well as different techniques to optimize diagnostic data.
- 3. State basic protocol of various U / S application methods of display. (B-mode, M-mode, color flow and Doppler, 3-D imaging, harmonics, and contrast agents used, etc.)
- 4. Discuss technical requirements of interpreting knowledge. Normal vs. pathology documentation indicators of progression for case presentation.
- 5. Prepare patient for exam. Confirm prep for exam and obtain medical history.
- 6. Demonstrate concepts of equipment set up as well as basic control manipulation for exam.
- 7. Perform "hands-on" scan of one U / S examination.

#### F. VASCULAR RADIOGRAPHY

Upon completion of the rotation in special procedures, the student will be able to demonstrate his or her knowledge and understanding of angiographic studies utilizing special equipment and techniques which demonstrates functioning organs and systems. The student will be able to assist in special procedure examinations. A Limited Specialty Achievement has been attained when the student is able to:

- 1. Set the x-ray machine controls and position the radiographic tube for angiographic studies.
- 2. Practice positioning a patient for radiographs.
- 3. Practice patient handling tasks specific to specific procedures.
- 4. Practice radiation safety during special procedures.
- 5. Practice aseptic techniques when handling materials and supplies necessary to the procedure.
- 6. List accessory equipment and state rationale for its use in special angiographic examinations.
- 7. Archive examination onto Compact Disc (CD).
- 8. Transfer archived examination from CD to Cardiologist's computer.

#### G. POSITRON EMISSION TOMOGRAPHY (PET)

Upon completion of the rotation in PET Scan, the student will be able to demonstrate his or her knowledge and understanding of the basic concept of PET Scan studies. A Limited Specialty Achievement has been attained when the student is able to:

- 1. State examinations benefiting from PET.
- 2. State methods in which images are recorded.
- 3. Describe briefly how the machine operates.
- 4. Prepare the patient for the procedure.
- 5. Set up the machine.
- 6. Identify cross-sectional anatomy.
- 7. Understand the uses of pharmaceuticals used in PET.

## XVI. STUDENT STATEMENT OF UNDERSTANDING

#### RADIOLOGICTECHNOLOGY STUDENT STATEMENT OF UNDERSTANDING

I	, hereby certify that I have read the Radiologi
Technology Clinical Handbook and h	nave had the opportunity to ask questions. As a condition of m
enrollment in the school, I agree to	o comply with the high standards and rules set forth therein
Failure to comply with the policies	may result in disciplinary action and / or dismissal from th
program.	
*The Radiologic Technology Clinica	al Handbook will supersede the Cameron University and Grea
Plains Technology Student Handbo	-
Charles Charles	
Student Signature	Date
Program Director	Date
Clinical Coordinator	Date
Instructor	Date
Instructor	 Date
Instructor	Date

This handbook has been approved by the Board of Education.