Angelina College
Radiography Handbook

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INTRODUCTION

The Angelina College Radiography Program Student Handbook contains policies, procedures, and behavioral expectations for student radiographers. Each student is expected to read and become familiar with information contained in this publication, as well as the basic policies and procedures published in the Angelina College Catalog and Student Handbook.

The provisions of the Radiography Student Handbook are subject to change by the faculty of the Angelina College Radiography Program (Program) without notice and do not constitute an irrevocable contract between any applicant for admission or student and the Program. The Program is not responsible for any misrepresentation of its requirements or provisions that might arise as a result of errors occurring in the preparations of the handbook.

The Program reserves the right to withdraw and change courses at any time, change fees, calendar, curriculum, progression requirements, delivery method, and any other requirement affecting students. Changes will become effective whenever the proper authorities so determine and will apply to both prospective students and those already enrolled. However, they will not increase the overall program length unless directed by accrediting agencies of the Program.

NOTICE OF NON-DISCRIMINATION

Angelina College provides education and employment opportunities without discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation, gender identity or gender expression. Angelina College complies with the Americans with Disabilities and Veterans Act.

PROGRAM ACCREDITATION

The Radiography Program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT- http://www.jrcert.org) Contact Information: JRCERT 20 N. Wacker Drive, Suite 2850 Chicago, IL 60606-3182 (312) 704-5300, www.jrcert.org or mail@jrcert.org. The program is JRCERT accredited for 8 years (2024-2031).

Angelina College is approved by Texas Higher Education Coordinating Board to offer the Radiography Technology Program.

Angelina College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award associate degrees. Angelina College also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of Angelina College may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (www.sacscoc.org).

PROFESSIONAL CREDENTIALS

Graduates are eligible to apply for the national certification examination in radiologic technology administered by the American Registry of Radiologic Technologists (ARRT). Upon successful completion of the Certification Examination, commonly called the "Registry," the graduate will be recognized as a **Registered Technologist – Radiographer - RT(R).** Graduates are also eligible to apply for state certification through the Texas Medical Board (TMB).

Anyone, however, convicted of a felony, gross misdemeanor or misdemeanor, with the sole exceptions of speeding and parking violations (all alcohol and/or drug related violations included), may be ineligible for certification by the ARRT and Texas Medical Board (TMB). If an applicant is concerned whether his/her conviction record will affect eligibility, contact the ARRT at (612) 687-0048 or www.arrt.org and TMB at (512) 305-7030 or http://www.verificic@tmb.state.tx.us

STATEMENT OF HIERARCHY

In case of conflict between the sponsoring Angelina College Catalog and the Radiography Student Handbook, interpretation of the conflict must be channeled through the Program Director to the appropriate person of authority.

An interpretation of a said policy and/or requirement will be requested of the appropriate person. Once the interpretation has been rendered, the policy and/or requirement will remain in force, be altered, or eliminated as dictated by the interpretation.

HEALTH CAREERS ORGANIZATIONAL STRUCTURE

Angelina College Radiography Program is a part of the School of School of Health Careers that is made up of six programs each having a director: radiography, nursing, respiratory care, pharmacy technology, surgical technology, and emergency medical services. The Directors and faculty for each program report to the Dean of the School of Health Careers.

STUDENT RESPONSIBILITY

Each student is required to maintain a copy of the AC Radiography Student Handbook for reference during Program enrollment. All students are required (at a designated date/time) to sign the signature page of the Radiography Student Handbook and turn it in to the instructor of the fall RADR 1266 and RADR 2366 clinical courses. Instructors review the handbook with students before each clinical course. The handbook is available online to students through Blackboard on the AC website. Students are also required to provide a **current address and telephone number** to the Radiography office and submit changes as they occur.

RADIOGRAPHY
MISSION AND PHILOSOPHY

The Radiologic Technology Program, in concert with the mission and philosophy of Angelina College, is committed to providing a quality and comprehensive education in general radiography for preparation in the profession. Through didactic information, educational resources, and a variety of clinical experiences, the program is designed to develop competent, responsible and independent radiography professionals. The program's mission is also supported by a dedicated team of experienced faculty, radiographers, and physicians who encourage and model life-long learning in radiography.

PROGRAM GOALS

1. Students will demonstrate entry-level competency for employment in the profession.
2. Students will recognize the importance of professionalism and ethical behavior.
3. Students will employ critical thinking and problem solving skills.
4. Students will demonstrate the ability to communicate effectively.

Program Effectiveness Goals

The program will accomplish its mission by graduating competent radiographers.

1. Graduates will pass the ARRT certification exam.
2. Graduates will be employed in the medical imaging field.
3. Graduates will be satisfied with their educational experience.
4. Employers will be satisfied with the quality of program graduates.

PROGRAM STUDENT LEARNING OUTCOMES

Upon the completion of an Associate of Applied Science degree in Radiologic Technology, the graduate should possess the knowledge and skills to implement safe, competent, entry level skills in diagnostic radiography.

<u>Goal 1: PSLO</u>
1. Students will properly position patients for routine radiographic procedures.
2. Students will select appropriate technical factors.
3. Students will employ safe radiation safety practices.

<u>Goal 2 : PSLO</u>
1. Students will conduct themselves in a professional manner.
2. Students will demonstrate ethical behavior.
3. Students will be cognizant of the importance of life-long learning.

<u>Goal 3: PSLO</u>
1. Students will critique radiographic images.
2. Students will modify routine procedures to meet the needs of the patient.

<u>Goal 4: PSLO</u>
1. Students will explain radiographic procedures to patients.
2. Students will give clear instructions to patients.
3. Students will obtain accurate information regarding patient history.

PROGRAM OBJECTIVES

To introduce the basic nursing knowledge and techniques required for successful employment as a radiographer.

To introduce the basic ethical and scientific knowledge and skills required for successful employment as a radiographer.

To introduce the radiographic projections utilized in the diagnosis of human osteologic abnormalities.

To introduce the basic exposure manipulation skills required for successful employment as a radiographer.

To introduce the normal fluoroscopic examinations and special radiographic procedures performed in the clinical affiliates.

To continually reinforce and expound on concepts, theories and facts previously introduced in earlier courses.

The objectives correspond with the terminal competencies that all students must demonstrate prior to graduation. The graduate of the radiography program will have demonstrated:

I. Patient Care and Management
   - A. Basic patient care and comfort, and anticipate patient needs.
   - B. Appropriate patient education.

II. Radiation Protection
   - A. Appropriate practice of radiation protection.

III. Imaging Procedures
   - A. An understanding of basic x-ray production and interactions.
   - B. Proper operation medical imaging equipment and accessory devices.
   - C. Proper positioning of the patient and medical imaging system to perform examinations and procedures.
   - D. Independent judgment and discretion in the technical performance of medical imaging procedures.
   - E. Knowledge of human structures, function, and pathology.

IV. Quality Assurance
   - A. Knowledge and skills relating to quality assurance activities.
   - B. Methods to evaluate the performance of medical imaging systems.
   - C. Methods to evaluate medical images for technical quality.

V. Recording Media Processing
   - A. Knowledge and skills relating to medical image processing.

VI. Equipment Maintenance
   - A. The appropriate safe limits of equipment operation.

B. Methods to recognize malfunctions and report them to the proper authority.

VII. Interpersonal Communication

Knowledge and skills relating to verbal, nonverbal, and written medical communication in patient care intervention and professional relationships.

VIII. Professional Responsibility

Recognition of the profession's code of ethics and compliance with the profession's scope of practice.

IX. Clinical Education

Competent performance in the following radiologic procedures on children and adults:

1. Head and neck
2. Abdominal, gastrointestinal, and genitourinary systems
3. Musculoskeletal
4. Chest
5. Trauma
6. Mobile/Surgical

Also, please note that job availability may require a graduate to work part-time or move to another city or state to obtain employment. The job market is driven by need and does fluctuate in the East Texas area.

INSTRUCTIONAL AND ADMINISTRATIVE PERSONNEL

PROGRAM DIRECTOR:

Angie W. Hill, M.Ed., RT (R)(CT)
Office: Health Careers II 128
Office phone: 936.633.5413 or
936.671.7348
ahill@angelina.edu

School of Health Careers Dean:

Winifred Ferguson-Adams, DPN, RN, M.Ed.
Office: Health Careers II 126
Office Phone: 936.671.7348
Angelina College - 936.639.1301
wadams@angelina.edu

CLINICAL COORDINATORS:

Autumn Conner, M.S.R.S., RT (R)(M), RDMS
Office: HC II 222 B
Office phone: 936.633.5422
or 936.671.7348
aconner@angelina.edu

Steven Donahoe, B.A.A.S, RT (R)
Office: HC II 121B
Office phone: 936 633 5414
or 936.671.7348
sdonahoe@angelina.edu

Health Careers II Administrative Assistant:

Daphne Shepherd
Office phone: 936.671.7348
dshepherd@angelina.edu

FACULTY:

John Lee, M.S.R.S., RT (R)
Office: HC II 121A Office phone: 936.633.5411
or 936.671.7348
jlee@angelina.edu

Bridgett Geist, M.S.R.S., RT (R)(M)
Office: HC II 129 Office phone: 936 633 5415
or 936.671.7348
bgeist@angelina.edu

PART-TIME FACULTY:

Lauren Sapp, A.A.S., RT(R)(CT)(M)
Office: HC II 129
Office phone: 936.671.7347 or
936.671.7348
lsapp@angelina.edu

NOTE: AC office phones have voice mail and Ms. Shepherd is able to contact instructors when necessary. Please leave a voicemail as evidence of the date and time called for clinical absences.

CLINICAL INSTRUCTIONAL FACILITIES

The majority of Radiography classes are taught on the main campus in the Health Careers II building. Laboratory experiences are provided in the Dr. Ernest R. Seitz, Sr. Radiation Center of the Health Careers II building. JRCERT recognized clinical education settings for the Program's clinical courses include:

St. Luke's Health - Memorial Hospital - **Lufkin**
Frank & Franklin
P. O. Box 1447
Lufkin, Texas 75901
936.634-8111 **(15 mins from AC)**

Woodland Heights Medical Center
505 S. John Redditt Drive
Lufkin, Texas 75904
936.637.8580 **(10 mins from AC)**

St. Luke's Health – Memorial Hospital - **Livingston**
1717 Hwy. 59 Bypass
Livingston, TX 77351
936.329.8517 **(1 hour from AC)**

Mid Coast Medical Center - Crockett
1100 East Loop 304
Crockett, TX 75835
936.546.3891 **(50 mins from AC)**

Nacogdoches Medical Center - South Campus
1204 Mound Street
Nacogdoches, Texas 75961
936.564.4611**(35 mins from AC)**
http://www.nacmem.org/

Nacogdoches Medical Center – Main Campus
4920 NE Stallings Drive
Nacogdoches, Texas 75965
936.569.9481 – NMC (hospital)
(45 mins from AC)

*****NMC - Imaging Center (outpatient)
4932 North Street
Nacogdoches, Texas 75969
936-462-9909
Across the street from NMC - Main Campus

Clinical Hours
1st year Fall and Spring Semesters – Tuesday/Thursday 8:00a.m. - 3:00p.m.
1st year Summer I Semester – Mon/Tues/Wed/Thurs/Friday 8:00a.m. - 3:30p.m.
Summer II Semester - OFF
2nd year Fall and Spring Semesters – Mon/Wed/Friday 8:00a.m. - 3:30p.m.

Pre-Clinical Clearance *(Refer to the program's estimated cost sheet on the Radiography webpage: https://angelina.catalog.prod.coursedog.com/pages/vFRMlWqE5SGzohIoSxFW*
Background Check – Successful/Clear. *(AC designated vendor)*
Drug Test – Negative. *(AC designated vendor)*
Documented Immunizations – (3) Hepatitis B vaccines, (2) MMR vaccines, (2) Varicella vaccines, Titers, Tdap, Annual TB test, (2) Meningococcal vaccine *(if under 22 years old)*, Flu vaccine annually in September, and at this time the current CDC or clinical site recommended Covid-19 vaccine(s).
CPR – American Heart Association (AHA) BLS Provider with CPR & AED training. *(Infant, Child, Adult, choking, and defibrillation)*
Liability Insurance – Annually included in Fall registration fees ($15).

NOTE: Student clinical placement is determined by the program faculty. Before graduating from the program, students could rotate to **all** clinical sites. If you live more **two hours** from any clinical site, please notify the program director. Students living more than two hours from a clinical site may not have to rotate to it.

*All hospitals, are recognized by The Joint Commission or the Texas Department of State Health Services.

ACADEMIC INFORMATION AND POLICIES

PROGRAM ADMISSION

The college will accept to the limit of its physical and financial resources all who wish to attend and who are eligible for admission to Angelina College and meet the requirements as outlined in the institution's Catalog. The Radiography Program, because of excessively high demand, has additional admission requirements, but does not discriminate on the basis of race, religion, color, gender, age, creed, national origin, veteran status, disability, or any other basis prohibited by law.

All applicants must be eligible for admission to Angelina College and meet the requirements as outlined in the institution's Catalog. All applicants are required to attend an information session in order to obtain a Program application. Dates of the information sessions are scheduled by the Health Careers II administrative office (HC II 128). These dates are posted on the AC School of Health Careers website. Students must meet application and immunization deadlines in order to be considered for selection. Selection of the students is based on the Grade Point Average (GPA) of the six prerequisite courses. According to GPA, students are ranked in descending numerical order and top 20-23 students will be selected to receive "conditional" acceptance into the program at the end of the Summer I semester each year. If there is a final GPA tie of one or more students, the final

Once a student has been "conditionally" accepted in the Program, a drug screen and certified background check must be completed from the Program's designated source. All information regarding immunization, CPR, drug and background screenings, and annual TB testing are reviewed prior to full acceptance into the program. A successful background and negative drug screening are required to receive "full" acceptance into the program. All expenses related to these health requirements are the student's responsibility.

FORMAL PROCESS - NEW APPLICANT

1. Application and acceptance to Angelina College.

2. Annually, attend a scheduled information session to obtain a Program application and/or information.

3. Submit completed application for the radiography program, receive appropriate immunizations as mandated by the Texas Department of State Health Services (DSHS) for health care workers, and provide proof of a current 2 year American Heart Association CPR - BLS Health Care Provider card no later than May 1st each year for August consideration. **All requested information must be received by the program in order for the application to be complete. The hepatitis B series (3 shots in 6 months) must be completed before the first clinical day of the Fall semester.**

4. Completion of all prerequisite courses with a passing grade of "C" or higher prior to the designated selection date: BIOL 2404, ENGL 1301, RADR 1201, RADR 1203, MATH 1314 or 1332, and PSYC 2301. **Prerequisite courses may be taken only twice for selection consideration. If a prerequisite course is taken more than twice** *(in the last five years)***, only the second grade will be calculated in the cumulative GPA for**

prerequisite courses. Students who receive a grade of “D” or “F” in a prerequisite course will not be eligible for consideration.

****Exception - <u>Prerequisite 5 Year Rule:</u>** After a five (5) year period has elapsed, a student can attempt a prerequisite course for a third time and it will count toward the GPA calculation for program entrance. The third (3rd) attempt will replace the oldest eligible prerequisite course attempt. Students retaking a credit course for the third time can be charged a higher credit hour fee. The student is responsible for payment. TX House Bill 78.

5. Submit official college transcript(s) indicating completion of prerequisite courses before the August decision date.
6. Acceptance into the radiography program is limited. Applicants will be ranked and selected based on the following criteria:
   a) Completion of **all** requirements by the published deadlines.
   b) Cumulative GPA in BIOL 2404, ENGL 1301, PSYC 2301, MATH 1314 or 1332, RADR 1201, and RADR 1203. Calculation of the GPA is accomplished after the end of the second Summer Session each year with students ranked in descending numerical order for conditional acceptance in the program. In case of GPA tie(s), the following items will be used for final selection: students with higher grades in MATH 1314 or Math 1332; BIOL 2404, RADR 1201, and RADR 1203 will receive greater consideration.
   c) “Conditional” program admission is based on the cumulative GPA in the prerequisite courses. The Radiography program currently accepts 20-23 students per year.
9. Applicants will be notified of “conditional” admission decisions by letter prior to fall registration.
10. Upon “conditional” acceptance into the program, a random drug screen and background check will be done at the student’s expense.
11. The drug screen and background check must be negative/successful to receive “full” acceptance into the program.

TUITION AND FEES

All tuition and fees must be paid in accordance with institutional policy as published in the AC Catalog under "Tuition and Fees." The College's tuition and fee rate schedule can be found on **Table A** at https://www.angelina.edu/tuition-fees/. The applicant packet contains an estimate of program costs.

FINANCIAL ASSISTANCE

Students seeking admission to the Radiography Program who are in need of financial assistance to meet expenses of the program should contact the Director of Student Financial Aid in Student Services and report the need to the School of Health Careers Office.

Some civic organizations and interested individuals provide funds for scholarships or sponsor students enrolled in the Program. The organization or sponsor providing the award establishes the amount of the scholarships and the recipient qualifications. Qualities considered may include aptitude, academic standing, personal attributes, and financial need.

TRANSFER STUDENTS

Any student who requests transfer into the Radiography Program must have earned at least a "C" in all transfer courses. Scholastic requirements outlined in the Angelina College Catalog will also govern the eligibility of the applicant for admission. Further consideration is based on the student submitting: (1) a letter of status from the Program Director of previous school, (2) a comprehensive description of Radiography courses and equivalent hours completed, (3) evidence of maintaining an overall "C" (2.5) GPA at previous school, and (4) two references from former instructors or clinical instructors regarding clinical performance. All transcripts, radiography course descriptions, syllabi, and official clinical competency records will have to be reviewed for transfer credit by the program director. Radiography program transfers must come from a JRCERT accredited program.

AC Catalog - Transfer Limitations

Students transferring to Texas public universities may find that not all lower-division courses are accepted for a bachelor's degree. The number of accepted freshman and sophomore semester credit hours may range from 60 to 66. However, some universities may accept more credit hours in special cases. Angelina College wants students to reach their educational goals, and the Office of Academic Success can assist students in making appropriate decisions about courses to take at AC. Students may contact the Office of Academic Success on the second floor of the Student Center or at (936) 633-5212 for assistance.

READMISSION

Former students may be allowed readmission on a "space available" basis. "Space available" is dependent upon the authorized number of students established by the JRCERT and the number of technologists and equipment available in the clinical education settings. The Program currently accepts 20-23 first year students per year. The job market, clinical sites, and the JRCERT

designated program capacity are all factors influencing the number of students accepted in the program each year.

After gaining full acceptance in the program, students who are unsuccessful (academic or withdrawal) in their first fall semester of the program, will be required to re-compete with the summer applicant pool for a position with the next years' incoming class.

Fully accepted students who continue in the program beyond the first semester can request readmission, but are not guaranteed a position. Program readmission is evaluated on a "space available" basis and ***only 1 readmission** will be granted. The readmission is based on a "first come/first serve" basis.

Readmission to the program will be based on the following:

1. Submission of a written request to the Radiography Program Director at least two months in advance of the semester registration that readmission is being sought.

2. Submission of current college transcripts to the Program.

3. Meet current admission requirements.

4. **Students must fulfill the graduation requirements that are in effect at the time of readmission. A minimum GPA of 2.0 is required to graduate.**

5. Students gaining readmission to the Program must retake academically deficient course(s) and may be required to audit course(s) that are offered in the same semester.

6. Previous radiography or transfer rad. students will follow the steps listed above and their transcripts will be evaluated by the Program Director and Registrar using the AC Catalog.

7. Another background check, updated immunizations, a negative drug test, TB (PPD) skin test, and a current AHA CPR BLS Provider card will be required.

GRADE APPEAL

Please refer to the online AC Catalog General Academic Information section or the website by clicking on the Student Resources tab, Policies & Procedures Manual, EGA- Grading and Credit (Regulation).
Also, the Health Careers webpage has a link for the Policies and Procedures Manual at the bottom of the page.

STUDENT COMPLAINTS (GRIEVANCE PROCEDURE)

Please refer to the AC website under the Student Resources tab, Policies & Procedures Manual, FLD- Student Complaints (Local). Also, the Health Careers webpage has a link for the Policies and Procedures Manual.

PROGRAM GRADING SYSTEM

The following grading system has been established for all use in all **Radiography (RADR)** courses:

A = 92 - 100
B = 83 - 91
C = 82 - 75
F = 74 and below

GRADE DETERMINATION

The specifics for grade determination in each course are contained within the appropriate course syllabus.

Examinations (written, computer based, or skills based) are used to determine the degree to which the individual learner has achieved the objectives. Conduct during scheduled examinations requires each learner to concentrate on and respond only to their own examination. Observations by the instructor(s) during this period and/or the review of the student's answers must not indicate any violation of this established principle. Violations will result in a failing grade, up to and including the grade of zero, on the measurement device in question at the discretion of the course instructor.

GRADE POSTING

Instructors post student grades in Blackboard course gradebooks. Students have access to course grades throughout the semester through BlackBoard or by asking the course instructor. Students can obtain mid-semester and final course grades on their AC student portal.

REVIEW OF EXAMINATIONS AND ASSIGNMENTS

Routine examinations in radiography courses, whether written or computer based, will be reviewed by the instructor and students.

Routine semester exams are generally reviewed the same day as taken or the next scheduled class day. **DO NOT** expect to receive your official grade or have it posted until the course instructor has reviewed and validated the exam. The exam stats will be processed and the individual score card will be passed out on the next scheduled class day for the course. **DO NOT** circumvent the process or the course instructor to receive your grade.

When reviewing exams, course instructors will **not tolerate disrespectful conduct** during the discussion of test items. If a student feels their concerns regarding a specific test item was not answered with the group review and needs further explanation, they are asked to see the course instructor after class for further clarification. Other course assignments will be reviewed according to a date scheduled by the instructor.

GRADUATION REQUIREMENTS

Graduation eligibility requires the student to have satisfactorily completed the prescribed curriculum and competency requirements with grades of "C" or better in **all** Radiography courses, prerequisite courses, and an overall "C" (2.0 GPA) in the remaining courses. All Radiography students are expected to participate in the College's May commencement to receive the award of their Associate of Applied Science degree.

Students who have successfully completed graduation requirements for the Associate Degree in the Radiologic Science also earn the right to purchase a program sash. Graduation regalia and a program sash can be ordered after applying for graduation.

GENERAL INFORMATION AND POLICIES

PROPER FORMS OF ADDRESS

When addressing faculty in the college and other facilities, students should use the last names of faculty preceded by Ms., Mr., or Dr. as applicable or requested by that individual. This form of address will also apply to all physicians and patients within the clinical education settings. Additionally, the faculty recommends that all medical imaging managers, Preceptors and staff be addressed in a similar manner as deemed appropriate by their employing facility. Appropriate recognition serves to strengthen proper relationships and foster mutual respect between faculty, clinicians, patients, and students.

FACULTY AND ADMINISTRATIVE OFFICES

Students have access to faculty members for consultation or advisement via telephone, email, or office visits. Faculty members post office hours outside their door, but welcome students at other times when they are available. While visiting the office of a faculty member or administrative assistant, the following rules will apply: (1) knock on office door and wait until asked to enter, (2) if the door is open but the faculty member is occupied in conversation or a telephone call, wait outside until she or he is available (if business is urgent or an emergency, a message should be left with the HC II administrative assistant or other faculty member indicating where the student may be reached when the specific faculty member is available), (3) students are not allowed to enter offices, borrow items, or use office facilities without the faculty member or administrative assistant being present.

Facilities, equipment, and supplies of departmental offices are only for the use of faculty and staff. **Due to copier expenses, the Program Director or a faculty member must approve all**

student requests for copies of information. Students should NOT ask the administrative assistant to copy items. The course instructor will provide one copy to each student or upload to Blackboard handouts or assignments for students. If a student is absent, they should contact the instructor before the next scheduled class day about any assignments they may have missed.

Electronic or audiovisual instructional equipment is not intended for student use unless authorized by a faculty member. Other instructional items such as phantoms and specific radiographic files are available for student use, but must not be removed from the college premises.

MAINTENANCE OF FACILITIES

Students should contribute to the cleanliness of the college facilities by adhering to the following Health Careers building rules: (1) food and drinks are **not allowed** in classrooms, computer labs, or laboratories, (2) classroom and laboratories should be left in an orderly manner for use by the next occupants, and (3) the campus is tobacco free.

Due to the daily schedule of classes in Health Career buildings from 8:00 am until 6:00 pm, a low noise level should be maintained in hallways, laboratories, classes, and offices to prevent disruption of learners. Cell phones and pagers should be turned **off** during classroom or laboratory presentations and activities. With the exception of an extreme emergency, students should not leave class to respond to a call, page, or visitor. Children and guest are not permitted in the classroom or clinical education settings.

RADIOGRAPHY LABORATORY PROCEDURES

Students are expected to maintain the radiography laboratory facilities on campus with as much care and order as expected in the actual clinical education settings. Since the maintenance and organization of radiographic rooms and equipment is the radiographer's responsibility in a clinical setting, students are expected to assume the maintenance and organization of the radiography lab in the educational setting. **NO FOOD or DRINKS are allowed in room 130 imaging rooms.**

Laboratory guidelines for operation and safety, as posted in the Radiography Lab, include the following: (1) required faculty supervision is required during all laboratory experiences, (2) each student is required to wear a radiation dosimeter during lab experiences, (3) doors to all three radiographic rooms must be closed during exposures, (4) students are not allowed to hold radiographic phantoms or remain in a radiographic room during an exposure, (5) students are not permitted to make radiographs of any human or animal subject (non-compliance may result in program dismissal), (6) exposures should never be made that exceed the maximum allowable energy indicated by the equipment manufacturer, and (7) all accidents that occur in the lab must be reported immediately to the supervising faculty member. In case of radiographic equipment damage or operating failure, use of the equipment should be discontinued immediately and reported to the supervising faculty member for further investigation and repair.

Procedures (positioning) laboratory:
All students are required to practice positioning techniques on lab partners. Please note that you will be a "patient" for another student to practice positioning on or be a patient for another student to complete a simulated laboratory practical test. You will not be exposed to radiation for this learning exercise, but the participants will have to palpate anatomy to find the area to center to for the simulated radiographic exercise. If you do not wish to have other students practicing exam positioning or palpating your anatomy in simulation, you will have to provide your lab partner with a patient (to stand in for you) for every required lab practice or test.

COMMUNICABLE DISEASE POLICY

Any student who has been diagnosed with a communicable disease or who comes in contact with a person who has a communicable disease is required to immediately report the situation to the Clinical Instructor and Program Director. The Clinical Instructor or Program Director will confer with the medical imaging manager of the clinical education setting to obtain specific institutional guidelines. The Clinical Instructor will report, as soon as possible, the necessary steps required for resumption of duties to the student, Clinical Coordinator, and Program Director. Depending upon the nature of the disease, a physician's release may also be required prior to the student resuming clinical participation. Some of the most common communicable diseases include: chicken pox, mumps, rubella, measles, infective conjunctivitis, staph infections, salmonella, scabies, hepatitis A, hepatitis B, hepatitis C, pneumonia, acquired immune deficiency, and tuberculosis. If a student is unable to meet the objectives or attendance requirements of a course due to a communicable disease, a passing grade may not be obtained.

Program Medical Release Policy

After experiencing a medical issue requiring emergency treatment and/or hospitalization, all program students are required to submit documentation to the Program Director indicating a full medical release or any prescribed physical limitations before returning to the clinical education setting. Notifying the Program Director and following any prescribed physical limitations are the responsibility of the student.

ALCOHOL AND DRUG POLICY

(Chemical Dependency Policy)

All students conditionally accepted into the Radiography Program are required to provide proof of a negative drug screen before the first class day of the Fall semester.

Angelina College and the Radiography Program **strictly prohibit** any student from being in a clinical or practicum education setting or on the campus under the influence of alcohol, drugs, or controlled substances. Students should be familiar with the institutional alcohol and drug policy as provided in the AC College Catalog in the section titled ***Student Rights and Responsibilities***. The AC Catalog is available on the AC website (www.angelina.edu). Click on the Student Resources tab.

If a student is suspected of being under the influence of alcohol or drugs in the clinical/practicum setting, the assigned clinical affiliate reserves the right to require a random drug test in accordance with its institutional policy. A student's participation in the clinical/practicum program is conditioned upon the student's willingness to waive any rights that the student may have and to consent to the initial drug testing, and subsequent random drug testing, if required by a clinical affiliate.

Angelina College is a TOBACCO and Vapor/E-cigarette FREE campus. Use of tobacco products and vapor/e-cigarettes is limited to the students' vehicle.

Firearms, Fireworks, and Explosives

The unauthorized possession or use of firearms, fireworks, explosives, or unauthorized hazardous chemicals of any description on College grounds or property, including residence halls, is prohibited.

Concealed Carry of Handguns Policy

Refer to Angelina College's Policy and Procedure Manual **under CHF (Site Management – Weapons) and CHFA (Concealed Carry of Handguns)** found on the College website.

*Other policies related to students are online in the Angelina College Catalog at www.angelina.edu and in the online Policies and Procedures Manual.

PREGNANCY POLICY

In accordance with the U.S. Nuclear Regulatory Commission Regulatory Guide 8.13 **Instruction Concerning Prenatal Radiation Exposure**, a pregnant student has the option to: (1) voluntarily declare and inform the Program Director of her pregnancy in writing, or (2) maintain the privacy of her pregnancy and not declare or inform anyone of the pregnancy.

If a student elects to disclose her pregnancy, a written declaration (ACRT Form #7) must be submitted to the program director. Following the receipt of all declaration documents, the Program Director, Radiation Safety Officer (RSO), and/or Clinical Coordinator will provide radiation counseling, request an additional radiation monitor to document fetal exposure, and apply the lower radiation dose limit for embryo/fetus exposure.

A pregnant student has the option to continue the academic and clinical components of the program without modification. The student is still expected to complete all program requirements, course objectives and assignments, and meet attendance standards. If the student is enrolled in a course with specific requirements that cannot be met due to physical limitations or excessive absences, the student may receive a failing grade (which must be removed prior to graduation), receive a grade of incomplete (which must be removed prior to the end of the next long semester), or elect to withdraw from the course. Due to the sequential nature of radiography courses, graduation may be delayed due to course availability and/or prerequisites.

During a declared pregnancy, the student may elect to revoke her declaration of pregnancy at any time with written notification (ACRT Form #7). Upon receipt of written revocation, the Program will no longer provide a fetal monitor and the lower dose limit for the embryo/fetus will no longer apply.

If the student chooses not to declare her pregnancy, the Program is not responsible for providing radiation counseling, additional monitoring, or reducing the radiation dose limits.

Although the Program provides instruction in radiation safety and practices radiation protection, neither Angelina College nor any of its clinical education settings will assume liability of the mother or child in case of pregnancy. Upon admission to the Radiography Program, all female students are required to read and sign the Student Certification of Pregnancy Policy Review (ACRT Form #5).

Information regarding federal guidelines for prenatal radiation exposure may be referenced at **https://www.nrc.gov/docs/ML0037/ML003739505.pdf** and is also provided as an attachment to the handbook.

PROFESSIONAL DEVELOPMENT

The Radiography Program emphasizes the development of professional values and the importance of life-long learning through information and expectations in both didactic and clinical courses. Radiography students are expected to develop and demonstrate personal characteristics and qualities based on the Standards of Ethics adopted by the American Registry of Radiologic Technologists. **ARRT Code of Ethics states:**

The Radiography Program also promotes the American Society of Radiologic Technologists (ASRT) Practice Standards that expect radiographers to use professional and ethical judgment and critical thinking during performance of duties. Unprofessional or unethical conduct by a student in the Radiography Program will not be tolerated. If noted, a conference between faculty and student will be scheduled immediately and documented on a Student Counseling Form (ACRT Form #2).

PROFESSIONAL ORGANIZATIONS

The Radiography Program also encourages students to join local and state professional associations for participation in meetings, activities, and competitions. First year students are encouraged to attend local professional activities while second year students are encouraged to travel to state or regional meetings.

Students are required to submit a written request to the Program Director for consideration of professional travel to a state or regional meeting. The request must be submitted at least two months prior to the meeting and should contain specific meeting details with expected educational outcomes. Required absences from radiography courses must also be included for consideration. The meeting decision and attendance criteria will be provided in a timely manner by the Program Director following consultation with program faculty. If approved, the student assumes financial responsibility for all meeting expenses and is expected to abide by the established attendance criteria. If the attendance conditions are not met, the student will receive course absences for the days missed.

STUDENT EMPLOYMENT

Since the Radiography Program is considered a full time program, students will need to responsibly manage work and study schedules in order to maintain the grade average required to meet Program standards. Although the faculty discourages outside employment during the first year of the Program, working more than two to three days per week is never suggested. Part-time employment arrangements are strictly between the **student and the employing institution**. Students employed in a healthcare institution **are not allowed to wear the Program's uniform, name badge, or radiation monitor during employment hours.**

ARRT® CODE OF ETHICS

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

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1. The Registered Technologist acts in a professional manner, responds to patient needs, and supports colleagues and associates in providing quality patient care.

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

3. The Registered Technologist delivers patient care and service unrestricted by the concerns of personal attributes or the nature of the disease or illness, and without discrimination on the basis of race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, familial status, disability, sexual orientation, gender identity, veteran status, age, or any other legally protected basis.

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

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

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

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

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

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

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

11. The Registered Technologist refrains from the use of illegal drugs and/or any legally controlled substances which result in impairment of professional judgment and/or ability to practice radiologic technology with reasonable skill and safety to patients.

Radiography Advisory/Preceptor Meeting

During the fall semester of the student's first year in the program, two (2) students (1 member, 1 alternate) will be elected from the first year class to be members of the radiography advisory/preceptor meeting. This is a two year commitment. If the elected student member cannot attend the biannual meetings, the alternate student member will be contacted and invited to attend. If the elected student member is no longer with the program, the alternate student will become the elected student member and another election will be held ASAP for the alternate student position.

The elected students' responsibilities are as follows:

1. Attend the Advisory portion of the Radiography Advisory/Preceptor meetings.
2. If unable to attend a meeting, report this to the department Administrative Assistant and Program Director at least three (3) days before the meeting is to take place.
3. Alert the alternate student member any time they may need to attend the committee meeting in place of the elected member.
4. Elected member should summarize information gained from the meeting and present it to the class ASAP after the meeting.
5. Contribute input regarding policies, procedures, or other information regarding the program. The student (with faculty assistance) will be responsible for obtaining the data or answering for the class.

Note: Please remember to wear your program uniform to these meetings.

PROGRAM ACCREDITATION STANDARDS

(Complaint Process for Non-Compliance)

With programmatic accreditation by the Joint Review Committee on Education in Radiologic Technology (JRCERT), the Angelina College Radiography Program adheres to the Standards for an Accredited Program in Radiologic Sciences. The Standards require a program to clearly demonstrate the appropriateness of its purposes, document its effectiveness, and provide assurance that it will continue to meet accreditation standards. Information regarding the Standards is presented and discussed with all students during introductory imaging courses.

Student complaints regarding allegations of Program non-compliance with **JRCERT STANDARDS** will be addressed in the following manner: (1) person(s) filing the complaint must do so in writing to the Program Director, (2) following an internal investigation, the Program Director will provide a written response to the complainant within three working days of complaint receipt, (3) if complainant is unsatisfied with the Program Director's response, the complainant can present the complaint to the School of Health Careers Associate Dean, (4) if resolution of the complaint cannot be reached at this level, the complainant can request further review by the VP of Academic Affairs, (5) if resolution of the complaint cannot be reached at this level, the complainant can request further review by the President of Angelina College.

If, after complainant's review of the institutional response, the complainant chooses to seek counsel with the JRCERT, the Program should receive a copy of the forwarded complaint for the purpose of documentation and validity. The resolution time frame for the institution under ordinary circumstances should not exceed one week, although resolution at the JRCERT level is at their discretion and is separate from the college. The Program will maintain all such complaints with their resolution in accordance with the United States Department of Education (USDE) regulations.

Contact Information:

JRCERT

20 N. Wacker Drive, Suite 2850

Chicago, IL 60606-3182

(312) 704-5300

www.jrcert.org or mail@jrcert.org

CLINICAL INFORMATION AND POLICIES

STUDENT RESPONSIBILITY FOR CLINICAL EDUCATION

Students must have their **own** reliable form of transportation that will enable them to travel to and from ***all*** clinical education settings utilized by the Program. Additionally, students are expected to report on time to the assigned clinical setting. Students should also become familiar with travel directions and designated parking prior to each new clinical assignment. Some clinical education settings will be repeated during the two years in the program.

All students must submit proof of a valid two year (2) American Heart Association BLS CPR certification for a Healthcare Provider prior to clinical participation. Current certification must be maintained throughout the Program. Students are also required to submit negative drug screen results, and proof of all required immunizations prior to the first clinical day. TB testing will be required annually in April. Clinical sites may require proof of immunizations, negative drug testing, CPR, and a clear background check for a student to attend clinical rotations.

CLINICAL ASSIGNMENTS

Clinical education assignments allow integration of classroom and lab knowledge with actual patient care experience. Each semester, students will be assigned to one of the six clinical education settings by the Program Director and Clinical Coordinator in consultation with and agreement of the faculty. Clinical assignments will be published approximately 30 days prior to the upcoming semester. All assignments are subject to revision at the discretion of the Program Director and Clinical Coordinator.

All clinical education settings reserve the right to **refuse** admission to any student who is involved in any activity not considered professional or conducive to proper patient care. If a clinical education setting expels a student for unprofessional and/or unethical conduct, the student may receive a grade of "F" for the clinical component of the course. If transfer to another clinical education setting is denied, the student will be counseled by the Program Director concerning the options available.

PROGRAM DRESS CODE

CAMPUS

While on campus, students should dress in a reasonable and appropriate fashion. During guest speaker or healthcare institution visits, however; professional/business attire is expected **(no sleeveless or thin strapped tops, shorts or miniskirts).**

CLINICAL UNIFORMS

Students are required to purchase uniforms following acceptance into the Program. All AC Allied Health programs are required to order uniforms from a designated source and have the AC Radiography Program insignia embroidered in gold on the uniform top and lab coat on the right upper chest. Students will be governed by the current dress policy that is periodically reviewed and revised by the Radiography Faculty. Uniforms and lab coats should be purchased as often as necessary to meet the **Dress Code Standards**.

Some laboratory sessions may occasionally be conducted in a clinical education setting of the Program. In this case, students are required to wear a their approved lab coat (with the AC Radiography Program insignia embroidered in gold on the right upper chest and student name tag on left upper chest) with professional attire and shoes that are quiet with low and closed heels.

Students who do not comply with **Dress Code Standards** will be dismissed from the clinical education setting for the rest of the day. A daily dismissal will be recorded as an absence, documented on a Student Counseling Form (ACRT Form #2), and reflected on the clinical evaluation grade.

DRESS CODE STANDARDS

A. **FEMALE STUDENTS**

1) Dark Purple slacks or skirt. Skirts must be knee length or slightly below the knee.
2) Dark Purple uniform top with the AC Radiography Program insignia embroidered in gold on the right upper chest.
3) A plain white or black tee shirt may be worn under the uniform top. Long sleeve tops under the uniform must be smooth and snug or tight fitting to the arms and the lower hem is tucked in the uniform slacks.
4) If needed, a black lab coat (hip length) with the AC Radiography Program insignia embroidered in gold on the right upper chest.

5) Hose, ankle or higher matching black or white solid colored socks, with white or black **ALL** smooth leather shoes (no colored stripes on shoes). No glitter or metallic. A purple, black, or white lanyard can be used to suspend the program name tag and dosimeter.

6) Minimal hair accessories **must** coordinate with the uniform as approved by faculty.

Hair cannot obstruct vision.

B. **MALE STUDENTS**

1) Dark Purple slacks.

2) Dark Purple uniform top with the AC Radiography Program insignia embroidered in gold on the right upper chest.

3) A plain white or black tee shirt may be worn under the uniform top. Long sleeve tops under the uniform must be smooth and snug or tight fitting to the arms and the lower hem is tucked in the uniform slacks.

4) If needed, a black lab coat (hip length) with the AC Radiography Program insignia embroidered in gold on the right upper chest.

5) Ankle or higher matching black or white solid colored socks with white or black **ALL** smooth leather shoes (no colored stripes on shoes). No glitter or metallic. A purple, black, or white lanyard can be used to suspend the program name tag and dosimeter.

6) Hair (cannot obstruct vision), mustache, and beards must be neatly trimmed and follow clinical site policies.

**** NOTE: UNIFORM MUST BE CLEAN AND WRINKLE FREE EACH DAY.****

C. **GENERAL, ALL STUDENTS**

1) **Natural Nails ONLY**. Must be clean, neat, and short (fingertip length). **NO polish**, stickers, or sparkles allowed.

2) No more than one ring on each hand and one neck chain.

3) **Small earrings (one stud in each earlobe) only; no drop or seasonal earrings. Only one earring per ear is allowed and they must be in each *EAR LOBE only*. No other visible body piercing jewelry is allowed. Ex. Only flesh colored gages in ears. No: tongue ring, or earrings going up the sides of the ears during clinical rotations.**

4) Hair should be neat, clean, off the shoulders, and in a moderate style that will not compromise safety (hair must **not obstruct vision** (male or female student) or fall forward over the patient or work area). Pull it back in a ponytail or use a hair clip.

5) NO vivid, extreme, or **unnatural** hair colors. Maroon, Pink, Blue, Green, and Orange are not natural hair colors.

6) Make-up should be worn conservatively.

7) No offensive odors. Colognes/perfumes or other scents should be minimal and mild in scent. Strong cologne/perfume, cigarette smoke, and body odor can be nauseating to patients, staff, and other students.

8) All body art (tattoos) **must be concealed** while in the clinical education settings.

9) Good personal hygiene is expected at all times.

10) AC and clinical education settings are tobacco and E-cigarette free.

11) College identification badge is to be worn on upper left side of chest or on a lanyard with the student's name, photo, and institutional information always visible. Do not cover with stickers or pins.

12) During clinical education setting visits, students must wear their AC name tag with professional/business attire and shoes that are quiet with low and closed heel.

13) The Program's Dress Code Standards will further honor the guidelines of each clinical education setting.

14) Repetitive violations of the Program's Dress Code Standards may result in denial of clinical experiences.

15) No gum chewing in the clinical. Only breath mints are allowed.

16) Do not eat food in the clinical education setting radiography rooms or sign in and go to breakfast.

17) Do not sit in the clinical education setting lounge areas or at common area tables. Whenever it is not busy, clean your assigned room and STUDY imaging information.

18) Do not bring magazines or novels to read in the clinical education settings or sit and read one.

19) Do not use clinical facilities computers to look up information. Always ask the radiographer to do it and it can only be exams related to the patient exam you are doing.

21) Do not search the internet while in clinical.

22) Do not bring electronic devices with you to clinical. No cell phones, IPads, Apple watches, tablets or readers. NO PERSONAL ELECTRONIC DEVICES IN CLINICAL.

23) Do not argue with clinical, hospital, or program personnel. Upon request, clinical instructors will discuss issues with students. These discussions will be handled in a rational manner. ***Do not use profanity in the clinical environment.***

IDENTIFICATION BADGES

Each student will be provided with one Angelina College name and photo identification badge upon acceptance in the Program. The identification badge is considered a part of the required clinical uniform and may be used at other college events. Replacement badges must be obtained from the Student Services office at the student's expense.

Official name badges **must** be worn with the approved uniform during clinical assignments. The badge is worn on the upper left side of the chest or on a lanyard with the student name, photo, and institutional information always visible. Failure to wear the identification badge may result in denial of clinical participation until one is appropriately worn.

RADIATION MONITORING/PROTECTION

All students are required to wear a radiation monitor (dosimeter) during clinical or laboratory assignments. Monitors are to be worn at chest level and outside of a lead apron when assigned to a radiation area of the clinical education setting. **NEVER** attach the dosimeter to the lead apron during fluoroscopy. The Program will also provide any declared pregnant student with an additional monitoring device (to be worn at waist level) for fetal dose evaluation. Upon departure from the clinical education setting or campus lab, monitors must be placed in a safe place away from sunlight or heat area. To limit possible damage to the monitors they should only be transported between the hospital and college campus on scheduled laboratory days. If a student fails to bring or wear his or her monitor during a clinical or laboratory assignment, the student may be dismissed from that assignment until the monitor can be located. If a monitoring device is lost or damaged, the student is required to immediately contact the Radiation Safety Officer (RSO) to request a replacement. Any and all unusual incidences concerning a radiation monitor must be immediately reported to the Clinical Coordinator. The radiation monitor should never be worn when a student has personal radiographic procedures performed for diagnostic or therapeutic purposes.

The Radiation Safety Officer (RSO) will announce the day dosimeters are to be returned/exchanged. Dosimeters are dated for use and will need to be turned in for analysis by the radiation monitoring service used by the program. A sign off sheet will be used to document the receipt, return or exchange of the program dosimeter. Radiation monitoring reports are reviewed by the RSO and initialed by the student within 30 days of receipt. **Students receiving 100 mrems in a monitoring period** will be required to consult with the RSO and clinical instructor to review radiation safety practices and to determine the probable cause of the reading. The clinical instructor will use the ACRT form #2 to document this meeting.

Students who have declared their pregnancy must follow the programmatic policy and timeline.

All students are educated in the radiation protection principle called **ALARA**. This is achieved during the student's first semester through the didactic portion of RADR 1201 and RADR 1411. This principle states that occupational and patient exposure should be kept ***As Low As Reasonably Achievable***. Four methods that students are instructed to practice ALARA include:

1. Always wear a personnel monitor device.
2. Appropriate use of proper patient immobilization devices.

3. Practice the use of close collimation, filtration of the primary beam, optimum kV techniques, use of appropriate image receptors or field size collimation, and minimum repeat exams.
4. Follow the three cardinal principles of radiation protection: the time, distance, and shielding principle.

In addition to ALARA, all students are instructed to provide appropriate lead protective apparel. Students should provide protective apparel to facility personnel and to members of the general public who are involved in a radiographic exam. Program policy requires students to also provide appropriate lead protective apparel to male and female patients who are of child bearing age. Radiographic exams on females of child bearing age require verification and documentation of the patient's LNMP prior to the exam being performed.

Holding an IR or restraining a patient during a radiographic exposure is not permitted. The facilities technologist will hold the IR or patient during the necessary exposure. The student is not allowed to make the exposure until the technologist or others assisting are wearing appropriate lead protective apparel.

LEAD MARKERS

All students are required to purchase lead (Pb) markers in order to anatomically mark radiographs. Two sets of lead (Pb)markers solid **blue (L),** indicating LEFT, and solid **red (R),** indicating RIGHT, rectangular markers with an minimum of the student's first and last initials. Markers must be purchased prior to clinical participation. Sources for marker orders can be found on the internet and in the program acceptance letter. ***Two sets of markers must be maintained at all times.*** If a marker is lost, the student must order a new set immediately. The student will need to show the AC radiography program instructor the order receipt for the replacement markers to stay in clinical rotations.

Students are required to use their **own** markers when performing radiographs in clinical and laboratory settings. Use of another student's markers is strictly prohibited! All students **must** use their own markers in order to perform competency examinations in the clinical setting and practicum exams in the laboratory setting. **No decorative, glitter, or shaped (ie. Skull) markers are allowed.**

CLINICAL POLICIES AND RULES

During clinical assignments, students must comply with the following rules:

1) Report to the assigned clinical education setting in a clean and wrinkle free uniform as approved by the Program.
2) Maintain all hospital and patient information as confidential in adherence with HIPAA regulations.
3) Radiographs are a part of the patient's medical record and property of the clinical setting. Students must follow departmental and HIPAA policies regarding the right of a patient or his/her family members to view radiographs.

4) Tobacco and Vapor/E-cigarettes are prohibited in the clinical education setting.

5) Food or drinks are only allowed in designated areas of the clinical education setting.

6) Do not refuse assignments from the Clinical Instructors, Preceptors, or staff that is commensurate with technical abilities.

7) Leaving an assigned area or clinical departure without the direct knowledge of the assigned Clinical Instructor or Preceptor is prohibited.

8) Patients will not be left unattended at any time.

9) Patients are to be addressed with title and last names (i.e., Mr. Jones, Miss Smith).

10) Physicians are to be addressed as “Dr.”

11) Holding an IR or restraining a patient during a radiographic exposure is not permitted. Technologists will hold the IR while the student exposes it.

12) Do not make a radiographic exposure when a clinical employee or family member remains in the room unless they are wearing proper radiation safety attire. Also, document the LNMP (age: 10-55) of the family member assisting in the room.

13) A student or clinical staff member must not alter attendance records.

14) The assigned Clinical Instructor may only make annotations on the student’s attendance records or clinical file.

15) Sleeping during any clinical assignment is prohibited.

16) Personal phone calls may not be received or made on clinical phones without the approval of the Clinical Instructor.

17) Tips or gratuity from a patient or the patient's family is not allowed.

18) Alteration of the scheduled clinical hours without the knowledge and agreement of the Clinical Instructor is prohibited.

19) Do **not** argue or challenge the authority of Clinical Instructors, Preceptors, or staff. If disagreements with clinical preceptors or staff occur, contact the assigned Clinical Instructor following task completion.

20) In the absence of the assigned Clinical Instructor, a clinical Preceptor will become the students’ immediate supervisor. If warranted, the preceptor can dismiss the student from clinical and will write an incident report describing the issue.

21) **Chewing gum is not permitted** in the clinical setting.

22) The **use of profanity is strictly prohibited**.

23) The college and Radiography Program **strictly prohibits** a student from being in a clinical education setting or on the campus under the influence of alcohol, drugs, or controlled substances. Refer to the AC Catalog section ***Student Rights and Responsibilities*** for review of the “Alcohol and Drug Policy”.

24) **Possession and/or use of all electronic devices (cellular phones, Apple watches, tablets, IPads) is prohibited** in any clinical education setting due to their interference with essential patient medical devices, patient care and dept. flow.

25) Students should maintain a professional relationship with faculty and clinical instructors/preceptors at the clinical sites. Boundaries need to be maintained between those who contribute to a students' clinical grade through evaluations, grading of competencies and when instructing student performing imaging procedures.

26) Having a relationship with someone who could influence your clinical grade is not recommended.

Examples:

1. Dating a technologist at your assigned clinical site.
2. Being social media friends with technologists at your clinical site.

27) The program must be informed if a student has a relative or relationship with a Rad. Tech. working at any clinical site.

INCIDENT REPORTS

If an unusual incident or accident occurs while a patient is in the care of a Radiography student, or when an incident involving a patient is witnessed by a student, and not by a clinical education setting employee, the student is required to immediately report the incident to the Clinical Instructor or Preceptor and the department manager of the institution. An unusual incident or accident may also be defined as any occurrence out of the ordinary which can or does impact the physical or mental health of the patient, a patient's family member, a clinical staff member, or the student. In addition to this type of unusual incident, any damage to equipment of the facility must be similarly reported. Incident report forms for both the clinical education setting and college (ACRT Form #8) must be completed prior to departure from the facility on the day of the occurrence. The instructor will, in a timely fashion, report the incident and appropriate follow-up action to the student and the Program Director. Financial costs for a student's personal injury are the responsibility of the student.

MALPRACTICE INSURANCE

All students are required to purchase professional liability insurance prior to participation in a clinical education setting. The insurance protects the student, college, and clinical education setting in case of any medical situation resulting in litigation. Generally, the insurance is purchased on an annual basis by both first and second year students during registration for the Fall semester.

DIRECT SUPERVISION

Prior to successful demonstration of a radiographic procedure competency evaluation, all students are required to be directly supervised by a qualified radiographer. Direct supervision is defined as student supervision by a qualified radiographer who reviews the procedure in relation to the student's achievement, evaluates the condition of the patient in relation to the student's

knowledge, is physically present during the conduct of the procedure, and reviews and approves the procedure and /or image. The radiography program requires all pediatric patient imaging procedures be performed under direct supervision, regardless of the level of student competency. Students must be directly supervised during surgical and all mobile, including mobile fluoroscopy procedures, regardless of the level of competency.

INDIRECT SUPERVISION

Following successful demonstration of a radiographic procedure competency evaluation, a qualified radiographer may indirectly supervise students. Indirect supervision is defined as student supervision provided by a qualified radiographer who is 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 is in use on patients.

REPEAT EXAMINATION POLICY

A qualified radiographer MUST BE PHYSICALLY PRESENT when a student performs a repeat of any unsatisfactory radiograph. Each documented occurrence of a student repeating an unsatisfactory radiograph without the presence of a qualified radiographer present will be harshly reflected on the Clinical Instructor Evaluation and may result in daily dismissal from the clinical education setting. **ALL** student repeated images must be logged in their ARRT clinical exam log book with a **"R" designating the repeat status** and initialed by the technologist supervising the repeat.

CLINICAL MEAL SCHEDULE

Students are allowed 30 minutes for a lunch break during the clinical day. These periods will be scheduled **daily** by, and at the discretion of, the assigned Clinical Instructor or Preceptor. Lunch periods are not cumulative and may not be used to shorten the clinical day. DO NOT wait on another student to go to lunch. Go when you are told to go and return on time.

STUDENT CONSULTATION

Each student will periodically meet with his/her Clinical Instructor, although students may request more frequent consultation as needed. The Clinical Instructor may, at any time, relieve a student of his/her work assignment for the purpose of counseling.

RADIOGRAPHIC CRITIQUE

Students will evaluate radiographs for quality and review of anatomy during critique sessions with his/her assigned Clinical Instructor. These sessions may be individualized or within a group setting.

DAILY DISMISSAL

A student may be dismissed from clinical on any day for inappropriate uniform, not wearing the official name badge, having a cell phone or electronic devices on their person, arguing with clinical radiographers, staff, the Clinical Instructor, or other students. Daily dismissal may also result from refusal to perform an assigned radiographic examination or other more serious breaches of conduct. A daily dismissal will be recorded as an absence, documented on a Student Counseling Form (ACRT Form #2), and reflected on the clinical evaluation grade. Dismissed students may also have points deducted from their clinical grade or final course grade average depending on the offense.

CLINICAL REQUIREMENTS

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

- Ten mandatory general patient care activities;
- 36 mandatory imaging procedures;
- 15 elective imaging procedures selected from a list of 34 procedures;
- One of the 15 elective imaging procedures must be selected from the head section; -AND-
- Two of the 15 elective imaging procedures must be selected from the fluoroscopy studies section.
- ****Additional Program requirements:***
- *Administer oxygen to a patient;*
- *Select patient exam data and process an IR correctly.*

CLINICAL REQUIREMENTS - FIRST YEAR

1. A minimum number of competencies must be completed from the **ARRT** checklist each semester. The course syllabus will designate the number and exams to choose from for competency.
2. Institutional protocol will determine the positions or projections used for each procedure.
3. Demonstration of competence includes: requisition evaluation, patient assessment, room preparation, patient management, equipment operation, technique selection, positioning skills, radiation safety, image processing, and image evaluation.
4. The minimum number of successfully completed competencies that must be graded by the Clinical Instructor (as opposed to Preceptors or clinical staff) is proportional to the amount of time that the instructor is available in the clinical setting. The specific number will be identified during the course orientation.
5. Clinical Instructors will evaluate students once the first clinical semester, twice in the following long semesters and once in the summer. After completion of the evaluation form, a counseling session will be held and the student will sign the form indicating that the counseling was accomplished. An evaluation of 74 or below results in counseling by the instructor using the ACRT Form #2 - Student Counseling Form. Two consecutive evaluations of 74 or below results in initial counseling by the instructor using the ACRT Form #2 - Student Counseling Form, followed by a conference with the Clinical Instructor and Clinical Coordinator. If warranted, the student may be referred to the Program Director for further counseling.
6. Additional student counseling periods **may** be scheduled by a Clinical Instructor as deemed necessary.
7. Clinical class days are Tuesday and Thursday of each week of the semester, except for official college holidays or official closing days due to weather. Students are advised to adhere to local broadcast information concerning campus closure due to **hazardous weather**. Announced closings will also be incorporated into the college voice mail message. Students should register with the college emergency notification system at www.getrave.com. Clinic hours are from **8:00 A.M. to 3:00 P.M.** unless otherwise informed by the instructor. All lunch periods (30 minutes) will be scheduled at the discretion of the Clinical Instructor. In cases of missed lunch breaks, due to participation in procedures, the Clinical Instructor may grant compensatory time.
8. Failure to successfully complete at least six (6) general patient care competencies and one (1) imaging procedure (2vw Chest or Abdomen 1vw) during the Fall Semester or twelve (12) imaging competencies during the Spring Semester will result in an **INCOMPLETE or a FAILING** grade regardless of the numeric average. The two (2) electives are included in the (12). The two (2) electives should be done on patients, but can be simulated with instructor approval.
9. All repeat radiographic examinations **must be** performed in the presence of a qualified radiographer. Each documented occurrence of repeating an unsatisfactory radiograph without the presence of a qualified radiographer will be reflected on the Clinical Instructor Evaluation and may result in daily dismissal from the clinical education setting. The Clinical Log book is used to document any repeat exams and must have the supervising technologist's initials noted by the "R" designated for repeat exams.
10. Clinical Competency Evaluations are conducted on a pass/fail basis and will influence the Clinical Instructor Evaluation.

CLINICAL REQUIREMENTS - SECOND YEAR

1. Institutional protocol will determine the positions or projections used for each procedure.
2. Demonstration of competence includes requisition evaluation, patient assessment, room preparation, patient management, equipment operation, technique selection, positioning skills, radiation safety, image processing, and image evaluation.
3. The minimum number of successfully completed competencies that must be graded by the Clinical Instructor (as opposed to Preceptors or staff) is proportional to the amount of time that the instructor is available in the clinical education setting. The specific number will be identified during the course orientation.
4. Clinical Instructors will evaluate students twice during each semester. After completion of the evaluation form, a counseling session will be held and the student will sign the form indicating that the counseling was accomplished. An evaluation of 74 or below results in counseling by the instructor using the ACRT Form #2 - Student Counseling Form. Two consecutive evaluations of 74 or below results in initial counseling by the instructor using the ACRT Form #2 - Student Counseling Form, followed by a conference with the Clinical Instructor and Clinical Coordinator. If warranted, the student may be referred to the Program Director for further counseling.
5. Additional counseling periods may be scheduled by the instructor as deemed necessary.
6. **All repeat radiographic examinations must be performed in the presence of a qualified radiographer and initialed in the students' clinical exam log book.** Each documented occurrence of repeating an examination without a qualified radiographer present will be reflected on the Clinical Instructor Evaluation and may result in daily dismissal from the clinical education setting. The Clinical Log book is used to document any repeat exams and must have the supervising technologist's initials noted by the "R" designated for repeat exams.

----FALL AND SPRING SEMESTERS----

1. Clinical class days are Monday, Wednesday, and Friday of each week of the semester, except for official college holidays or official closing days due to weather. Students are advised to adhere to local broadcast information concerning campus closure due to **hazardous weather**. Students should register with the college emergency notification system at www.getrave.com. Announced closings will also be incorporated into the college voice mail message. Clinical hours are from **8:00 A.M. to 3:30 P.M.** unless otherwise informed by the instructor. All lunch periods (30 minutes) will be scheduled at the discretion of the Clinical Instructor. In cases of missed breaks or lunch breaks due to participation in procedures, compensatory time **may** be granted by the Clinical Instructor.
2. Failure to successfully complete at least seventeen (17) Competencies during each semester will result in an INCOMPLETE or a FAILING grade regardless of the numeric average. The two (2) electives are included in the (17). The two (2) electives should be done on patients, but can be simulated with instructor approval.

3. The course grade system is stated in the respective course syllabus.
4. Exception: Spring semester- second year: Fifteen (15) procedures accomplished on a patient(s) and the remaining elective procedures (if needed) may be performed on a patient, but can be simulated with instructor approval.

-----SUMMER SEMESTER-----

1. Clinical class days are Monday through Friday of each week of the semester, except for official college holidays or official closing days due to weather. Students are advised to adhere to local broadcast information concerning campus closure due to **hazardous weather**. Students should register with the college emergency notification system at www.getrave.com. Announced closings will also be incorporated into the college voice mail message. Clinical hours are from **8:00 A.M. to 3:30 P.M.** unless otherwise informed by the instructor. All lunch periods (30 minutes) will be scheduled at the discretion of the Clinical Instructor. In cases of missed breaks or lunch breaks due to participation in procedures, compensatory time **may** be granted by the Clinical Instructor.
2. Failure to successfully complete at least fourteen (14) competencies (includes two (2) electives) during the Summer Session will result in an **INCOMPLETE or a FAILING grade** regardless of the numeric average. The two (2) electives should be done on patients, but can be simulated with instructor approval.
3. Clinical Competency Evaluations are conducted on a pass/fail basis and will influence the Clinical Instructor Evaluation. The Standard of Performance (ACRT Form #21) provides the basis for evaluation of competency. One clinical instructor evaluation will be done on the student at the end of the summer semester.

ATTENDANCE INFORMATION AND POLICIES

DIDACTIC CLASS ATTENDANCE

Students are expected to be punctual and attend all classes on a regular basis. Attendance will be recorded promptly at the beginning of all classes.

The established & published class times will be observed. Students arriving late disrupt others who arrive on time. ***Roll will be taken at eight (8) minutes after the published start of class and absences recorded without further changes***. Please refer to the college online catalog, radiography program handbook, and course syllabi regarding tardy and absence policies. **NOTE**: Family members are not allowed in the classroom during class time as they provide disruption for others.

Students who must miss class on the day of an examination should notify either the Radiography Program office or the course instructor in advance of the absence. Also, refer to the course syllabus.

Students are responsible to make arrangements with the course instructor(s) for makeup quizzes, tests, examinations, etc. the **next class day** following their return to class. The instructor(s) of the course will determine the degree of penalty that will be assessed against unit assignments when make-up is necessary. No penalty, as far as reduction in an earned grade, will be assessed on major tests and examinations.

However; the following information should be reviewed regarding habitual absences from a didactic course and the reduction of the final course average noted.

Didactic course absences. Due to program didactic course material being covered at a rapid pace, students are expected to attend class regularly. The radiography program will follow the established College Catalog and radiography program handbook policies regarding didactic course absences.

1. If a student has three (3) consecutive or four (4) cumulative didactic course day absences, they will be dropped from the course and the instructor of record will allow one (1) readmission to the course for the student.

2. If a student is habitually absent from a radiography didactic course, the instructor of record will **deduct:**

   5% from the final course average for the fifth (5) absence.
   An additional 10% from the final course average for the sixth (6) absence for a total of 15%.
   An additional 15% from the final course average for the seventh (7) absence for a total of 30%.

   NOTE: Students missing a total of seven (7) classes from a didactic course will be unable to pass the class with the deduction of 30% from the final

course grade. The passing score for a radiography course is 75 in each program course.

****Some radiography courses are taught one day a week with the class day equating to two (2) didactic course days.****

All students are required to follow the published college schedule for final examinations. Changes in the final examination schedule are only allowed with permission from the course instructor and Vice President of Academic Affairs.

Only emergency situation will warrant permission being given by the course instructor to take a final exam at a time different from the published date in the course syllabus. Examples of emergency situations are: hospitalization of the student, death of an immediate family member (father, mother, child or grandparent), etc.

****Leaving on a vacation will not be considered an emergency situation.****

CLINICAL ATTENDANCE

Students are required to attend all clinical assignments as scheduled by the Program and Clinical Coordinators. Daily attendance records will be used to document clinical attendance and tardiness. Students will utilize the Clinical Attendance Log (ACRT Form #13) to sign in upon arrival and sign out upon departure. Students will not, however, be allowed to sign each other in or out. Attendance records will be verified daily by the Clinical Instructor or Preceptor. If a student fails to sign in or out, attendance may be verified by a written, signed note from the Preceptor or supervising radiographer by the beginning of the next clinical day. Failure to sign in or out and/or submit the appropriate documentation will result in the student being charged with an absence. Falsification of any attendance records will result in an automatic counseling session with the instructor of record which will be documented on the ACRT form #2. The incident will result in points deducted from the clinical instructor evaluation of the student(s) involved in the incident.

If unavoidable circumstances arise that will prevent clinical attendance or result in being tardy, **both the Clinical Instructor and the imaging department** of the student's assigned clinical education setting **must be notified prior to** the scheduled arrival time. The name of the individual who received the message should be written down. Telephone numbers of the Radiography faculty and department managers have previously been included in the handbook. Failure to notify the Clinical Instructor and clinical education setting will adversely affect the student's clinical evaluation grade.

Emergency situations such as a car accident will be counted as an absence. If the student is able to attend clinical by 9:00a.m., they will only receive a tardy.

Habitual tardiness and/or absenteeism represent a lack of responsibility and will not be tolerated. The following absence and tardy guidelines will be enforced in all clinical courses.

Clinical Tardy

Tardy is defined as "not being at the assigned area as scheduled." **It does not matter that a student is "only ___ minutes late**." Three clinical tardies will equate to one clinical absence (refer to the Clinical Absence section below regarding absence policies). Tardiness in excess of **one hour**, will also equate to one clinical absence. Each tardy will also affect the student's clinical evaluation grade.

Clinical Absence

Absences and tardies will be reflected on the students' Clinical Instructor Evaluation grade. Upon the third (3rd) absence, one (1) letter grade will be deducted from the final course grade. With each subsequent absence another letter grade will be deducted from the final course grade. Example: A student with an "A" average for the final course grade, but having three (3) absences will have his/her grade reduced to a "B." A student with an "A" average for the final course grade, but having four (4) absences will have his/her grade reduced to a "C." A student with a "B" average for the final course grade, but having four (4) absences will have his/her grade reduced to a "D." Since attendance represents dependability, absences will also affect the clinical evaluation grade.

Bereavement Absence (Clinical)

Students are permitted up to three (3) days per year if death of an immediate family member occurs. Immediate family includes: spouse, child, mother, father, brother, sister, mother or father-in-law, brother or sister-in-law, stepparents, stepchild, or grandparent. Any absence in excess of the allowed days (3) will be considered as routine clinical absences (2 per clinical semester).

Other bereavement requests for those not listed above will need to be approved on a case by case basis by the Program Director. Proof of bereavement absence is required by the Program Director.

Upon return to the clinical rotation site, a funeral program must be given to the clinical instructor. If proof of bereavement is not turned in to the clinical instructor within one week of the days taken off, the absence from clinical will be documented as a routine clinical absence.

DIDACTIC AND CLINICAL COURSE DROPS/WITHDRAWALS

Absences from didactic classes and/or from clinical courses follow the college policy regarding attendance on the AC website under the Faculty tab, Policies & Procedures Manual, FBD-Admissions and Attendance (Regulation). Also, the Health Careers webpage has a link for the Policies and Procedures Manual.

Excessive didactic class absences can subject the student to being “dropped” from the course and/or program when three consecutive absences or four cumulative absences are recorded for a Fall or Spring semester. The number of absences decreases to two consecutive or three cumulative for dismissal from a course during a Summer Session.

If a student is permanently "dropped" from a lecture course(s) or a clinical course(s) for excessive absences, the Program Director will determine if the student should be removed from the program due to a lack of didactic and clinical integration as required by the JRCERT.

If a student is considering withdrawal or has been dropped from a course in the Program, he or she must report to the Radiography Program office for withdrawal and re-admission information. Students are also required to officially withdraw in the Angelina College Office of the Registrar. Official withdrawal from the College will possibly prevent the student from receiving a grade of "F" for the course(s) in progress at the time of withdrawal. Institutional policies as listed in the AC Catalog under "System of Grading" and "Schedule Changes" will govern all final decisions.

Emergency Course/Clinical Format Changes

If a crisis or emergency is declared by the President of the College, a change in course format or delivery methods may occur. This could mean changing courses to hybrid or online formats.

Clinical rotations may require students to attend in staggered shifts and to wear PPE during the shift. Students may be required to purchase PPE to attend clinical.

Clinical shifts will reflect the facilities availability and rules in place.

If an emergency is declared and you are unable to complete your required work, you will have the option of asking your instructor for an Incomplete in the course and will be allowed to finish the course within a prescribed timeframe.

Be sure and check your AC student email, AC homepage, and Blackboard for updates and assignments.

This policy outlines student responsibilities when transporting patients and accessing secured hospital areas.

Patient Transport Procedures

Before taking a patient to the imaging department:

1. Notify the department personnel that you are picking up the patient. ie. Nursing or ED station.
2. Verify the patient's identity by:
    - Asking the patient to state their **full name** and **date of birth (DOB)**.
    - Checking that the information matches the patient's ID wristband.
3. If the patient does **not** have an ID wristband:
    - Stop the transport process immediately.
    - Notify the department desk.
    - Do not transport the patient until a wristband has been applied.
4. After returning the patient:
    - Notify the appropriate department personnel that the patient has returned.
    - Document the name of the staff member notified both:
        - Before transporting the patient.
        - After returning the patient.

Secured Area Access

- Students may **not** use hospital employees' ID badges to enter secured areas (such as the Emergency Department, ICU, nursery, etc.).
- If the facility issues a student access badge/key card:
    - Sign it out before use.
    - Sign it back in before leaving the clinical site each day.

Consequences of Violations

Failure to follow these protocols may result in:

- Counseling,
- A reduction in clinical evaluation grades,
- Programmatic probation.

Key point: Patient identification, proper communication with hospital staff, and compliance with security procedures are mandatory for all students.

SCHOOL OF HEALTH CAREERS

POLICY AND PROCEDURE
CELL PHONE USAGE

Objective: To create an uninterrupted learning environment for all students.

Purpose: Prohibit the use of cell phones during all classes, campus laboratories, and clinical settings (i.e. hospitals, doctor's offices, community settings, and other facilities).

POLICY

School of School of Health Careers faculty and staff will be consistent with the corrective actions taken to prohibit the use of cell phones during class, laboratory, and clinical settings.

During classroom/didactic and laboratory settings, cell phones are to be turned off and out of sight, eliminating disruptions.

Students are prohibited from carrying and/or using cell phones during clinical hours.
During clinical hours, cell phones are to be left in vehicle and not to be found on student.

During test, whether in classroom or computer lab, students are prohibited to carry and/or use cell phones.

PROCEDURE: Classroom and Laboratory Setting

- First consequence – verbal warning, with student being dismissed from class and may return at break (if student chooses to leave, then it will be counted as an absence). *Absences will be documented and cumulative.*

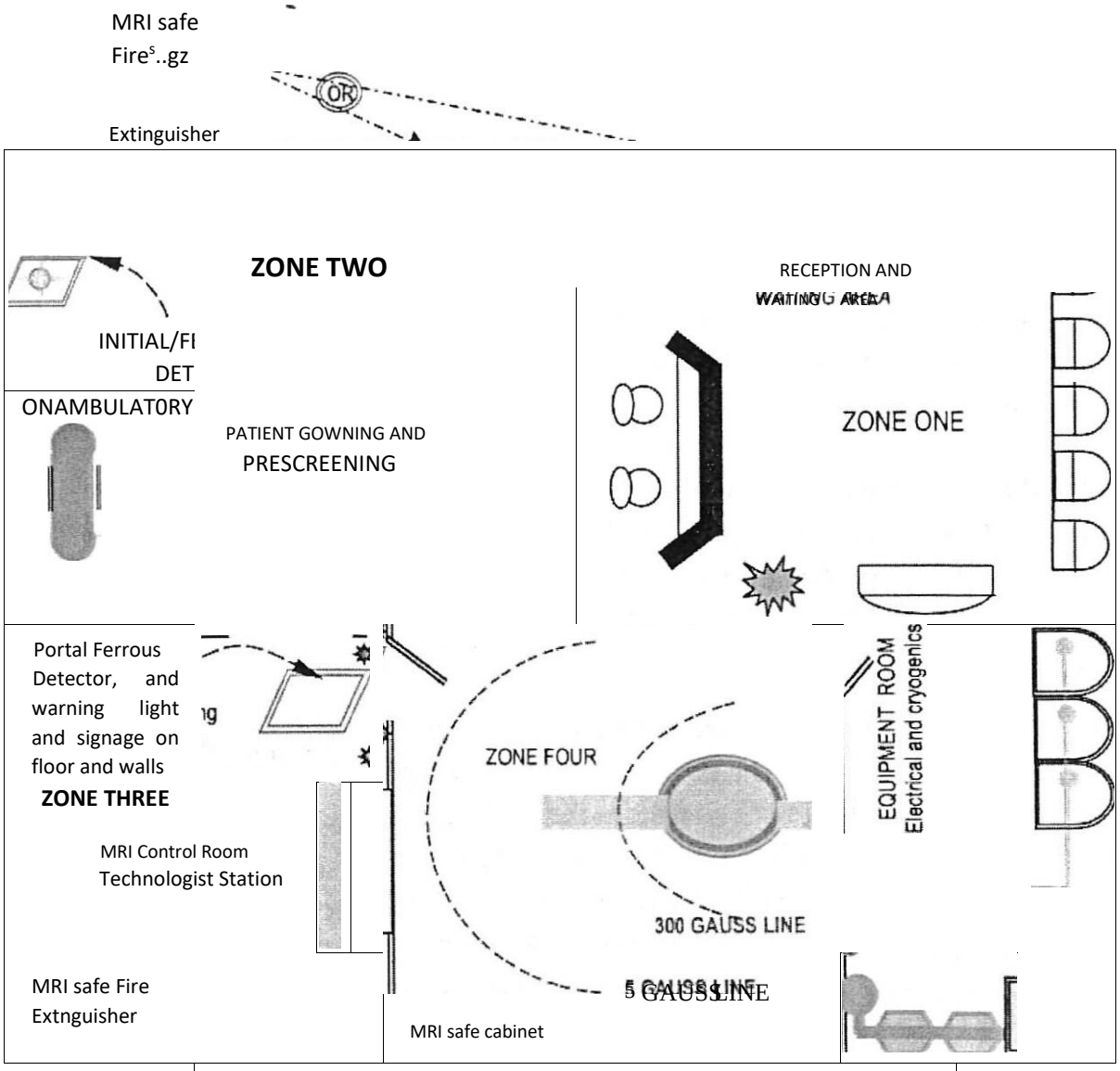
- Second consequence – student will be dismissed from class with an absence. *Absences will be documented and cumulative.*

- Third and subsequent consequences – 5 points will be deducted for each incident from final average of that course(s).

PROCEDURE: Clinical Setting

- Student will be dismissed from clinical with an absence for each incident. *Absences will be documented and cumulative.*

MRI Safety



GENERAL ROOM DESIGN WITH ZONES FOR RECEPTION, PRESCREENING, CONTROL ROOM AND FINAL SCREENING, MRI MACHINE ROOM AND ASSOCIATED EQUIPMENT ROOM

Due to the powerful magnetic field used by the MRI Scanner, many Magnetic Resonance Imaging (MRI) facilities and hospitals restrict access to the MR Suite by establishing four conceptual zones around the MRI scanner. Each boundary zone in this four-zone safety system is defined by its purpose and distance from the MRI scanner. Since the magnetic field extends in three dimensions, some zones may extend into other areas or floors of the facility.

Zone One consists of all areas freely accessible to the general public. This zone includes the entrance to the MR facility and the magnet poses no hazards in these areas.

Zone Two acts as a buffer between Zone One and the more restrictive Zone Three. Here, patients are under the general supervision of MR personnel. Normally, these areas are also safe from the powerful magnet. Zone Two may include the reception area, dressing room and interview room.

Access to **Zone Three** should be restricted by a physical barrier. Only approved MR personnel and patients that have undergone a medical questionnaire and interview are allowed inside Zone Three. The MR control room and/or computer room are located within Zone Three.

Zone Four is strictly the area within the walls of the MR scanner room, sometimes called the magnet room. Access into the MR scanner room should only be available by passing through Zone Three. Zone Four is sometimes considered to be inside of Zone Three because it does not have a direct entrance to unrestricted areas. Zone Three and Zone Four are sometimes collectively referred to as the MR Suite.

Inside the MR Suite is an invisible boundary defined by the magnetic field's five Gauss line. The five Gauss line is the point at which the magnetic field begins to affect electromagnetic devices, such as pacemakers. Because the magnetic field extends in all directions, the five Gauss line can also extend to areas outside of the MR Suite, including other floors, if the magnetic field is large enough. Magnetic fields cannot be seen or felt, C) so the five Gauss line is sometimes marked on floors or walls for safety. Marking the five Gauss line is particularly important when it extends beyond the walls of the MR scanner room.

Typical Set of MR Protocols

The first protocol: No one enters the magnet room (Zone 4) without the approval of the MRI technologist — no exceptions.
The second protocol: No one enters the magnet room (Zone 4) without being prescreened or being certified at MRI Safety Level Two status — no exceptions.
The third protocol: Everyone must know that the machine is always on.

All equipment and devices brought into Zone 4 must be either MRI-safe or compatible, and have been prescreened by MRI Level Two staff.

Programmatically, Angelina College Radiography students are NOT allowed beyond Zone Two or MR Suite, depending on the facility's floorplan.
All students are required to notify AC Radiography faculty immediately of any changes in health status related to MRI safety.

Handout and PowerPoint presented in RADR 1266. Reviewed in RADR 2333.

EDUCATIONAL PLAN

EVALUATING DIDACTIC (COGNITIVE AND AFFECTIVE) COMPETENCY

OVERVIEW:

Educational writings have consistently held that the majority of cognitive learning that takes place in an educational program begins with conventional classroom activities. The methodologies and activities employed include lecture, discussion, demonstration, performance, audio-visual presentations, programmed instruction, computer-assisted instruction, and individualized instruction.

Although methodologies and activities convey the message to the learner, the educator is still responsible for determining the learner's level of understanding.

EVALUATING DIDACTIC (COGNITIVE AND AFFECTIVE) COMPETENCY:

Competency or mastery of the Program's didactic portion is accomplished by a variety of measurement devices. Primarily, the objective type (recognition) written test or examination is utilized.

Examinations administered in the radiography program include multiple choice, true/false, short answer, and matching questions. The questions, derived from text reading and/or classroom activities, are based on specific learning objectives presented in the course syllabus. Other strategies may include the use crossword puzzles, film critiques, and osteologic identification from articulated or disarticulated skeletons.

SEQUENCE:

On the first day of a didactic course, the learner is given a course syllabus, which contains all of the pertinent information about the course, i.e., course description, credit hours, placement of the course within the prescribed curriculum, length of the course, method(s) of instruction, assignments, the number and weight of the different measurement devices, the grading system, assisted instruction software, central objective, specific behavioral objectives, and the class calendar. The instructor of record for the class will review the syllabus and acquaint the student with the expected outcome and the level of acceptable performance for the course.

Classes are conducted on a regular basis and kept in accordance with the publicized times and days.

Examinations are administered on a timely basis as indicated in the class calendar. After the examination has been scored, the instructor will review and discuss the results with the students. If students have questions about the material, a discussion is developed to enhance the learning process.

At the end of the semester, a comprehensive final examination over the course of study is administered.

Grade determination for attainment of didactic competency is accomplished in accordance with that published in the syllabus. Grades below the level of "C" are considered unacceptable, and may require the student to repeat the course prior to their continuation in the Program. In any event, the learner must repeat the course and earn a grade of "C" or better before Program completion occurs.

EVALUATING CLINICAL (PSYCHOMOTOR AND AFFECTIVE) COMPETENCY

OVERVIEW:

It is the intent of the Clinical Objectives Evaluation to provide a standardized format for the evaluation of clinical performance within the Radiography Program.

DOMAIN INTEGRATION:

It is commonly acknowledged that the cognitive, psychomotor and affective aspects of a curriculum are very much integrated and occur simultaneously within the program. In order to maximize clinical participation, however, the student should have mastered necessary cognitive competencies prior to or in conjunction with the clinical aspect of the program. These cognitive competencies normally include: Patient Care, Radiographic Imaging Equipment, General Human Anatomy and Physiology, Principles of Radiographic Imaging I & II, Basic Radiographic Procedures, Intermediate Radiographic Procedures, Advanced Medical Imaging, Radiographic Pathology, Radiation Biology and Protection, Radiographic Technology Seminar, and Special topics in Medical Radiologic Technology.

CLINICAL PARTICIPATION:

As demonstrated on the accompanying flow chart (Figure 1), the cognitive, psychomotor, and affective domain predominate during the clinical participation phase. The student first begins clinical participation by observation of a qualified radiographer during the performance of duties. The participation moves from a **passive mode of observation** to a more **active mode** as the student begins to assist the radiographer during radiographic, administrative, and processing procedures. The rate of student progress will be dependent upon the student's ability to comprehend and perform the various tasks (cognitive and psychomotor objective

accomplishments). As the student becomes experienced in a given procedure(s), there is gradual movement toward an **independent clinical performance stage**. At this point, the student is actually performing procedures under the direct supervision of a radiographer or Clinical Instructor, thereby integrating the cognitive, psychomotor and affective domains.

CLINICAL COMPETENCY EVALUATION:

When the student has experienced sufficient practice and is able to perform a procedure at an acceptable level of performance, he or she may request evaluation by the Clinical Instructor or Preceptor to determine clinical competency of a particular procedure. Upon successful completion (Pass) of the clinical competency evaluation, the student will be allowed to perform the examination with indirect supervision. If the student fails the competency evaluation, he or she would return for additional clinical experiences before being allowed to request further evaluation of that particular procedure. The student would continue to practice examinations while pursuing experience and/or the required number of examinations until the end of the course.

COMPLETES REQUIREMENTS FOR CLINICAL PERFORMANCE:

Once the student has successfully completed the required clinical experience and clinical objectives for all clinical courses, elective rotations with suitable objectives are available to complete the course obligations imposed by the State of Texas.

The path of clinical progression provides the student with opportunities to progress at a rate that is consistent with his or her ability and knowledge.

The establishment of, progression through, and successful evaluation of clinical competency evaluations consider student performance as a constant, and time now becomes the variable for completion. There are, however, constraints imposed by the State that are also satisfied.

Glossary of Terms

Clinical Competency Evaluation - The procedure by which a student's performance of a particular procedure is evaluated.

Clinical Participation - Didactic, labs, and limited hospital practice.

Competency - The ability to attain an accepted level of proficiency within the realm of limited supervision to assume the duties and responsibilities as specified in course objectives.

Direct Supervision – Assures patient safety and proper educational practices.

The JRCERT defines direct supervision as student supervision by a qualified radiographer who:

- reviews the procedure in relation to the student's achievement.
- evaluates the condition of the patient in relation to the student's knowledge.
- is physically present during the conduct of the procedure; and
- reviews and approves the procedure and/or image.

*Students must be directly supervised until competency is achieved.

*Students must be directly supervised during surgical and all mobile, including mobile fluoroscopy procedures, regardless of the level of competency.

**Repeat of unsatisfactory images are conducted under direct supervision.

The radiography program requires all pediatric patient imaging procedures be performed under direct supervision, regardless of the level of student competency.

Indirect Supervision – Promotes patient safety and proper educational practices.

The JRCERT defines indirect supervision as that supervision provided by a qualified radiographer who is 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.

Laboratory - A work area for student practice that should include a phantom, radiographic table, overhead tube and accessories.

Laboratory Practice -

- A. Instruct INSTRUCTOR
- Demonstrate
- C. Practice STUDENT
- Examination

Qualified Radiographer - A radiographer possessing American Registry of Radiologic Technologists certification or equivalent with active registration and practicing in the profession.

Radiographic Examination (Exams) - A series of radiographic exposures of an anatomical part that is sufficient to permit diagnostic evaluation of that part.

INTEGRATION OF CLINICAL COMPETENCY EVALUATION INTO A PROGRAM

FORWARD:

A Clinical Competency Evaluation System is a standardized method of evaluating the performance of students.

IMPLEMENTATION:

The Program Director, in consultation with the Clinical Coordinator, Clinical Instructors, and clinical Preceptors will:

Arrange and structure the clinical phase of training into meaningful units. Each unit will hereafter be referred to as a clinical education course.

Integrate the clinical education courses with the didactic courses, thus integrating the cognitive, psychomotor, and affective domains.

Specify the subject material (psychomotor) aspects of each clinical education course.

Determine the level of supervision for each student based on attainment of competency.

Determine each evaluation procedure.

Identify the standard of performance to demonstrate competency.

Identify the remedial procedure for failure.

Identify the required examinations preceding competency evaluation.

Establish the administrative procedure for recording evaluation results.

Conduct appropriate training for measuring competencies.

The clinical competency evaluation system has been developed utilizing the elements of current educational theory. A structured evaluation tool has been designed for evaluation of

students during clinical performance. The instrument is essentially objective and assists in reduction of evaluation bias by providing a degree of consistency in grade determination.

STRUCTURE OF CLINICAL EDUCATION:

Clinical education courses are prevalent throughout the entire radiography program. Each course contains specific objectives and competency requirements. The structure of clinical education reflects a progression of required competencies:

Area & Activity:

LAB - Demonstration and practice

CLINICAL PARTICIPATION - Observe, assist and perform

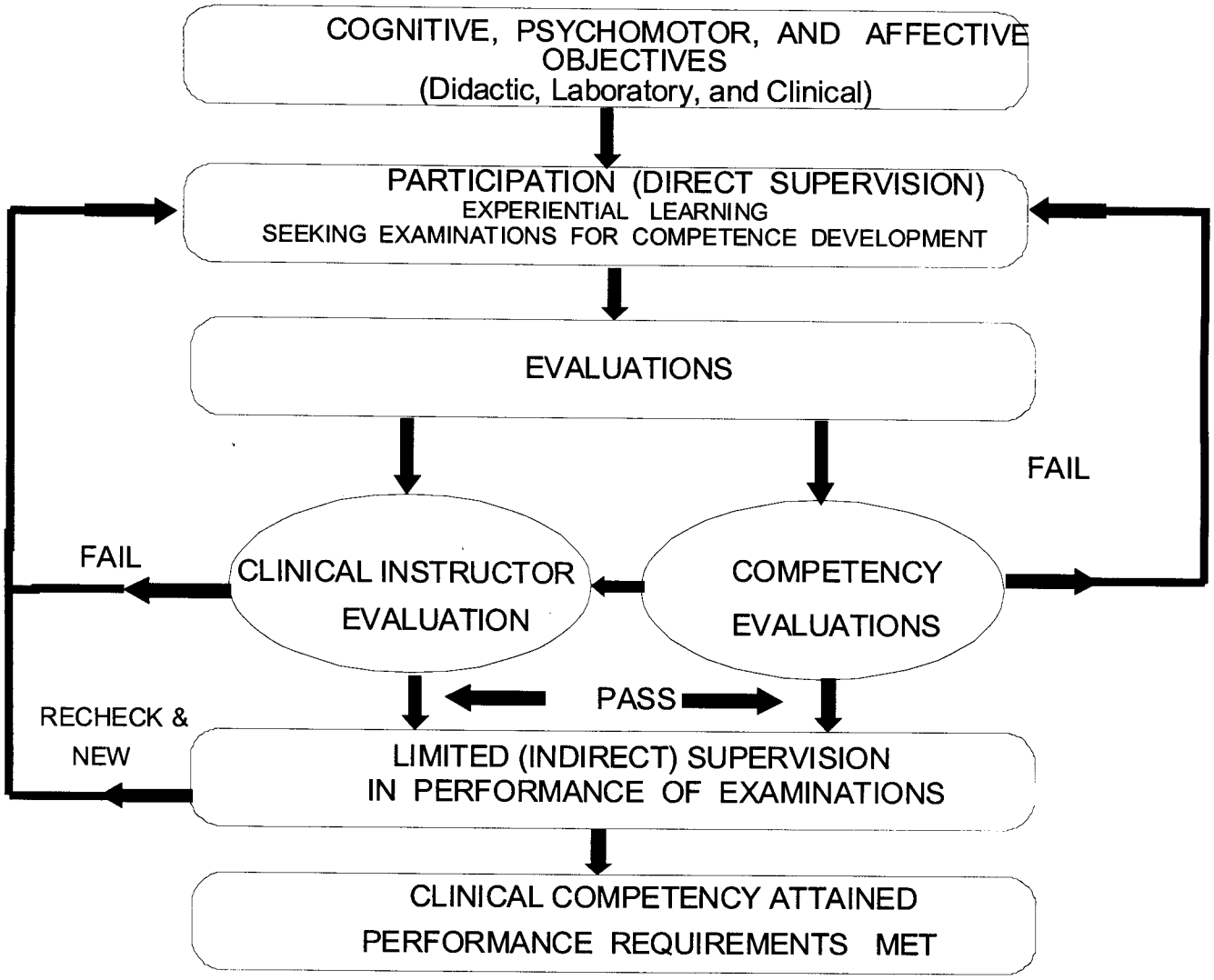
CLINICAL COMPETENCIES - Upon successful completion of Clinical Competencies, will perform in the area with limited supervision

Clinical Instructor EVALUATION - Accomplished by the Clinical Instructor twice a semester to evaluate cognitive, psychomotor, and affective domain objectives. Clinical Preceptors and staff also assist in the process by providing evaluation of each student to the Clinical Instructor.

TERMINAL COMPETENCIES - Following completion of the summer clinical course, terminal objectives are evaluated to assess final competency.

LABORATORY:

Competency evaluations are introduced in the laboratory setting to integrate cognitive learning with psychomotor skills and appropriate affective behaviors. Laboratory competency, however, does not and should not enter into the Clinical Competency Evaluation system. Laboratory evaluations merely prepare the learner for clinical participation.



CLINICAL PARTICIPATION:

Clinical participation consists of the observation, assistance, and performance in the clinical environment. The student refines and expands performance and is evaluated by a required number of clinical competencies using ACRT FORM #23, Clinical Competency Grade Sheet.

TERMINAL COMPETENCIES:

After the completion of the last clinical course, a final assessment for attainment of terminal competencies is accomplished and documented in the last section of ACRT Form #20, Clinical Objectives Checklist. This assessment process requires Clinical Instructor interaction in the review of the preceding sections of the ACRT Form #20.

During the fall and spring semesters of the second year of clinical training, AC instructors will require those students participating in RADR 2366 and RADR 2367 to complete terminal competency re-evaluations of specific body areas. Only AC instructors can re-evaluate these exams. Students will be responsible for recertifying competency in the following areas:

1. **Spine** – C, T, or L spine. Complete series.
2. **Upper extremity** – Thumb or Finger, Hand, Wrist, Forearm, Elbow, Humerus, Shoulder, or Clavicle.
3. **Lower extremity** – Foot, Ankle, Lower Leg, Knee, Femur, or Hip.
4. **Torso** – Abdomen 1vw, Abdomen Decubitus or Upright, or Pelvis.
5. **Mobile Studies** – Chest, Abdomen, or Extremity (upper/lower).
6. **Thorax –** Chest 2vw, Ribs, or Sternum.

*The AC instructor will grade the re-certification competencies. Three (3) terminal competency areas must be graded for recertification during the fall and spring semesters. **All six (6) areas** must be recertified before a student can graduate.

Students are allowed to notify the AC Instructor that a patient exam qualifying as a terminal competency is on the way or in the department.

Regulatory Guide 8.13 - Instruction Concerning Prenatal Radiation Exposure

(Draft was issued as DG-8014)

Revision 3

June 1999

A. INTRODUCTION

The Code of Federal Regulations in 10 CFR Part 19, "Notices, Instructions and Reports to Workers: Inspection and Investigations," in Section 19.12, "Instructions to Workers," requires instruction in "the health protection problems associated with exposure to radiation and/or radioactive material, in precautions or procedures to minimize exposure, and in the purposes and functions of protective devices employed." The instructions must be "commensurate with potential radiological health protection problems present in the work place."

The Nuclear Regulatory Commission's (NRC) regulations on radiation protection are specified in 10 CFR Part 20, "Standards for Protection Against Radiation"; and Section 20.1208, "Dose to an Embryo/Fetus," requires licensees to "ensure that the dose to an embryo/fetus during the entire pregnancy, due to occupational exposure of a declared pregnant woman, does not exceed 0.5 rem (5 mSv)." Section 20.1208 also requires licensees to "make efforts to avoid substantial variation above a uniform monthly exposure rate to a declared pregnant woman." A declared pregnant woman is defined in 10 CFR 20.1003 as a woman who has voluntarily informed her employer, in writing, of her pregnancy and the estimated date of conception.

This regulatory guide is intended to provide information to pregnant women, and other personnel, to help them make decisions regarding radiation exposure during pregnancy. This Regulatory Guide 8.13 supplements Regulatory Guide 8.29, "Instruction Concerning Risks from Occupational Radiation Exposure" (Ref. 1), which contains a broad discussion of the risks from exposure to ionizing radiation.

Other sections of the NRC regulations also specify requirements for monitoring external and internal occupational dose to a declared pregnant woman. In 10 CFR 20.1502, "Conditions Requiring Individual Monitoring of External and Internal Occupational Dose," licensees are required to monitor the occupational dose to a declared pregnant woman, using an individual monitoring device, if it is likely that the declared pregnant woman will receive, from external sources, a deep dose equivalent in excess of 0.1 rem (1 mSv). According to Paragraph (e) of 10 CFR 20.2106, "Records of Individual Monitoring Results," the licensee must maintain records of dose to an embryo/fetus if monitoring was required, and the records of dose to the embryo/fetus must be kept with the records of dose to the declared pregnant woman. The declaration of pregnancy must be kept on file, but may be maintained separately from the dose records. The

licensee must retain the required form or record until the Commission terminates each pertinent license requiring the record.

The information collections in this regulatory guide are covered by the requirements of 10 CFR Parts 19 or 20, which were approved by the Office of Management and Budget, approval numbers 3150-0044 and 3150-0014, respectively. The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

B. DISCUSSION

As discussed in Regulatory Guide 8.29 (Ref. 1), exposure to any level of radiation is assumed to carry with it a certain amount of risk. In the absence of scientific certainty regarding the relationship between low dose exposure and health effects, and as a conservative assumption for radiation protection purposes, the scientific community generally assumes that any exposure to ionizing radiation may cause undesirable biological effects and that the likelihood of these effects increases as the dose increases. At the occupational dose limit for the whole body of 5 rem (50 mSv) per year, the risk is believed to be very low.

The magnitude of risk of childhood cancer following in utero exposure is uncertain in that both negative and positive studies have been reported. The data from these studies "are consistent with a lifetime cancer risk resulting from exposure during gestation which is two to three times that for the adult" (NCRP Report No. 116, Ref. 2). The NRC has reviewed the available scientific literature and has concluded that the 0.5 rem (5 mSv) limit specified in 10 CFR 20.1208 provides an adequate margin of protection for the embryo/fetus. This dose limit reflects the desire to limit the total lifetime risk of leukemia and other cancers associated with radiation exposure during pregnancy.

In order for a pregnant worker to take advantage of the lower exposure limit and dose monitoring provisions specified in 10 CFR Part 20, the woman must declare her pregnancy in writing to the licensee. A form letter for declaring pregnancy is provided in this guide or the licensee may use its own form letter for declaring pregnancy. A separate written declaration should be submitted for each pregnancy.

C. REGULATORY POSITION

1. Who Should Receive Instruction

Female workers who require training under 10 CFR 19.12 should be provided with the information contained in this guide. In addition to the information contained in Regulatory Guide 8.29 (Ref. 1), this information may be included as part of the training required under 10 CFR 19.12.

2. Providing Instruction

The occupational worker may be given a copy of this guide with its Appendix, an explanation of the contents of the guide, and an opportunity to ask questions and request

additional information. The information in this guide and Appendix should also be provided to any worker or supervisor who may be affected by a declaration of pregnancy or who may have to take some action in response to such a declaration.

Classroom instruction may supplement the written information. If the licensee provides classroom instruction, the instructor should have some knowledge of the biological effects of radiation to be able to answer questions that may go beyond the information provided in this guide. Videotaped presentations may be used for classroom instruction. Regardless of whether the licensee provides classroom training, the licensee should give workers the opportunity to ask questions about information contained in this Regulatory Guide 8.13. The licensee may take credit for instruction that the worker has received within the past year at other licensed facilities or in other courses or training.

3. **Licensee's Policy on Declared Pregnant Wome**n

The instruction provided should describe the licensee's specific policy on declared pregnant women, including how those policies may affect a woman's work situation. In particular, the instruction should include a description of the licensee's policies, if any, that may affect the declared pregnant woman's work situation after she has filed a written declaration of pregnancy consistent with 10 CFR 20.1208. The instruction should also identify who to contact for additional information as well as identify who should receive the written declaration of pregnancy. The recipient of the woman's declaration may be identified by name (e.g., John Smith), position (e.g., immediate supervisor, the radiation safety officer), or department (e.g., the personnel department).

4. **Duration of Lower Dose Limits for the Embryo/Fetus**

The lower dose limit for the embryo/fetus should remain in effect until the woman withdraws the declaration in writing or the woman is no longer pregnant. If a declaration of pregnancy were withdrawn, the dose limit for the embryo/fetus would apply only to the time from the estimated date of conception until the time the declaration is withdrawn. If the declaration is not withdrawn, the written declaration may be considered expired one year after submission.

5. **Substantial Variations Above a Uniform Monthly Dose Rate**

According to 10 CFR 20.1208(b), "The licensee shall make efforts to avoid substantial variation above a uniform monthly exposure rate to a declared pregnant woman so as to satisfy the limit in paragraph (a) of this section," that is, 0.5 rem (5 mSv) to the embryo/fetus. The National Council on Radiation Protection and Measurements (NCRP) recommends a monthly equivalent dose limit of 0.05 rem (0.5 mSv) to the embryo/fetus once the pregnancy is known (Ref. 2). In view of the NCRP recommendation, any monthly dose of less than 0.1 rem (1 mSv) may be considered as not a substantial variation above a uniform monthly dose rate and as such will not require licensee justification. However, a monthly dose greater than 0.1 rem (1 mSv) should be justified by the licensee.

D. IMPLEMENTATION

The purpose of this section is to provide information to licensees and applicants regarding the NRC staff's plans for using this regulatory guide. Unless a licensee or an applicant proposes an acceptable alternative method for complying with the specified portions of the NRC regulations, the methods described in this guide will be used by the NRC staff in the evaluation of instructions to workers on the radiation exposure of pregnant women.

REFERENCES

1. USNRC, "Instruction Concerning Risks from Occupational Radiation Exposure," Regulatory Guide 8.29, Revision 1 , February 1996.

2. National Council on Radiation Protection and Measurements, Limitation of Exposure to Ionizing Radiation, NCRP Report No. 116, Bethesda, MD, 1993.

APPENDIX: QUESTIONS AND ANSWERS CONCERNING PRENATAL RADIATION EXPOSURE

1. Why am I receiving this information?

The NRC regulations (in 10 CFR 19.12, "Instructions to Workers") require that licensees instruct individuals working with licensed radioactive materials in radiation protection as appropriate for the situation. The instruction below describes information that occupational workers and their supervisors should know about the radiation exposure of the embryo/fetus of pregnant women. The regulations allow a pregnant woman to decide whether she wants to formally declare her pregnancy to take advantage of lower dose limits for the embryo/fetus. This instruction provides information to help women make an informed decision whether to declare a pregnancy.

2. If I become pregnant, am I required to declare my pregnancy?

No. The choice whether to declare your pregnancy is completely voluntary. If you choose to declare your pregnancy, you must do so in writing and a lower radiation dose limit will apply to your embryo/fetus. If you choose not to declare your pregnancy, you and your embryo/fetus will continue to be subject to the same radiation dose limits that apply to other occupational workers.

3. If I declare my pregnancy in writing, what happens?

If you choose to declare your pregnancy in writing, the licensee must take measures to limit the dose to your embryo/fetus to 0.5 rem (5 millisievert) during the entire pregnancy. This is one-tenth of the dose that an occupational worker may receive in a year. If you have already received a dose exceeding 0.5 rem (5 mSv) in the period between conception and the declaration of your pregnancy, an additional dose of 0.05 rem (0.5 mSv) is allowed during the remainder of the pregnancy. In addition, 10 CFR 20.1208, "Dose to an Embryo/Fetus," requires licensees to make efforts to avoid substantial variation above a uniform monthly dose rate so that all the 0.5 rem (5 mSv) allowed dose does not occur in a short period during the pregnancy. This may mean that, if you declare your pregnancy, the licensee may not permit you to do some of your normal job functions if those functions would have allowed you to receive more than 0.5 rem, and you may not be able to have some emergency response responsibilities.

4. Why do the regulations have a lower dose limit for the embryo/fetus of a declared pregnant woman than for a pregnant worker who has not declared?

A lower dose limit for the embryo/fetus of a declared pregnant woman is based on a consideration of greater sensitivity to radiation of the embryo/fetus and the involuntary nature of the exposure. Several scientific advisory groups have recommended (References 1 and 2) that the dose to the embryo/fetus be limited to a fraction of the occupational dose limit.

5. What are the potentially harmful effects of radiation exposure to my embryo/fetus?

The occurrence and severity of health effects caused by ionizing radiation are dependent upon the type and total dose of radiation received, as well as the time period over which the exposure was received. See Regulatory Guide 8.29, "Instruction Concerning Risks from Occupational Exposure" (Ref. 3), for more information. The main concern is embryo/fetal susceptibility to the harmful effects of radiation such as cancer.

6. Are there any risks of genetic defects?

Although radiation injury has been induced experimentally in rodents and insects, and in the experiments was transmitted and became manifest as hereditary disorders in their offspring, radiation has not been identified as a cause of such effect in humans. Therefore, the risk of genetic effects attributable to radiation exposure is speculative. For example, no genetic effects have been documented in any of the Japanese atomic bomb survivors, their children, or their grandchildren.

7. What if I decide that I do not want any radiation exposure at all during my pregnancy?

You may ask your employer for a job that does not involve any exposure at all to occupational radiation dose, but your employer is not obligated to provide you with a job involving no radiation exposure. Even if you receive no occupational exposure at all, your embryo/fetus will receive some radiation dose (on average 75 mrem (0.75 mSv)) during your pregnancy from natural background radiation. The NRC has reviewed the available scientific literature and concluded that the 0.5 rem (5 mSv) limit provides an adequate margin of protection for the embryo/fetus. This dose limit reflects the desire to limit the total lifetime risk of leukemia and other cancers. If this dose limit is exceeded, the total lifetime risk of cancer to the

embryo/fetus may increase incrementally. However, the decision on what level of risk to accept is yours. More detailed information on potential risk to the embryo/fetus from radiation exposure can be found in References 2-10.

8. What effect will formally declaring my pregnancy have on my job status?

Only the licensee can tell you what effect a written declaration of pregnancy will have on your job status. As part of your radiation safety training, the licensee should tell you the company's policies with respect to the job status of declared pregnant women. In addition, before you declare your pregnancy, you may want to talk to your supervisor or your radiation safety officer and ask what a declaration of pregnancy would mean specifically for you and your job status. In many cases you can continue in your present job with no change and still meet the dose limit for the embryo/fetus. For example, most commercial power reactor workers (approximately 93%) receive, in 12 months, occupational radiation doses that are less than 0.5 rem (5 mSv) (Ref. 11). The licensee may also consider the likelihood of increased radiation exposures from accidents and abnormal events before making a decision to allow you to continue in your present job. If your current work might cause the dose to your embryo/fetus to exceed 0.5 rem (5 mSv), the licensee has various options. It is possible that the licensee can and will make a reasonable accommodation that will allow you to continue performing your current job, for example, by having another qualified employee do a small part of the job that accounts for some of your radiation exposure.

9. What information must I provide in my written declaration of pregnancy?

You should provide, in writing, your name, a declaration that you are pregnant, the estimated date of conception (only the month and year need be given), and the date that you give the letter to the licensee. A form letter that you can use is included at the end of these questions and answers. You may use that letter, use a form letter the licensee has provided to you, or write your own letter.

10. To declare my pregnancy, do I have to have documented medical proof that I am pregnant?

NRC regulations do not require that you provide medical proof of your pregnancy. However, NRC regulations do not preclude the licensee from requesting medical documentation of your pregnancy, especially if a change in your duties is necessary in order to comply with the 0.5 rem (5 mSv) dose limit.

11. Can I tell the licensee orally rather than in writing that I am pregnant?

No. The regulations require that the declaration must be in writing.

12. If I have not declared my pregnancy in writing, but the licensee suspects that I am pregnant, do the lower dose limits apply?

No. The lower dose limits for pregnant women apply only if you have declared your pregnancy in writing. The United States Supreme Court has ruled (in United Automobile Workers International Union v. Johnson Controls, Inc., 1991) that "Decisions about the welfare of future children must be left to the parents who conceive, bear, support, and raise them rather than to the employers who hire those parents" (Reference 7). The Supreme Court also ruled that your employer may not restrict you from a specific job "because of concerns about the next generation." Thus, the lower limits apply only if you choose to declare your pregnancy in writing.

13. If I am planning to become pregnant but am not yet pregnant and I inform the licensee of that in writing, do the lower dose limits apply?

No. The requirement for lower limits applies only if you declare in writing that you are already pregnant.

14. What if I have a miscarriage or find out that I am not pregnant?

If you have declared your pregnancy in writing, you should promptly inform the licensee in writing that you are no longer pregnant. However, if you have not formally declared your pregnancy in writing, you need not inform the licensee of your non-pregnant status.

15. How long is the lower dose limit in effect?

The dose to the embryo/fetus must be limited until you withdraw your declaration in writing or you inform the licensee in writing that you are no longer pregnant. If the declaration is not withdrawn, the written declaration may be considered expired one year after submission.

16. If I have declared my pregnancy in writing, can I revoke my declaration of pregnancy even if I am still pregnant?

Yes, you may. The choice is entirely yours. If you revoke your declaration of pregnancy, the lower dose limit for the embryo/fetus no longer applies.

17. What if I work under contract at a licensed facility?

The regulations state that you should formally declare your pregnancy to the licensee in writing. The licensee has the responsibility to limit the dose to the embryo/fetus.

18. Where can I get additional information?

The references to this Appendix contain helpful information, especially Reference 3, NRC Regulatory Guide 8.29, "Instruction Concerning Risks from Occupational Radiation Exposure," for general information on radiation risks. The licensee should be able to give this document to you.

For information on legal aspects, see Reference 7, "The Rock and the Hard Place: Employer Liability to Fertile or Pregnant Employees and Their Unborn Children--What Can the Employer Do?" which is an article in the journal Radiation Protection Management.

You may telephone the NRC Headquarters at (301) 415-7000. Legal questions should be directed to the Office of the General Counsel, and technical questions should be directed to the Division of Industrial and Medical Nuclear Safety.

You may also telephone the NRC Regional Offices at the following numbers: Region I, (610) 337-5000; Region II, (404) 562-4400; Region III, (630) 829-9500; and Region IV, (817) 860-8100. Legal questions should be directed to the Regional Counsel, and technical questions should be directed to the Division of Nuclear Materials Safety.

REFERENCES FOR APPENDIX

Regulatory Guide 8.13, Revision 3, Instruction Concerning Prenatal Radiation Exposure. https://www.nrc.gov/docs/ML0037/ML003739505.pdf

National Council on Radiation Protection and Measurements, Limitation of Exposure to Ionizing Radiation, NCRP Report No. 116, Bethesda, MD, 1993.

International Commission on Radiological Protection, 1990 Recommendations of the International Commission on Radiological Protection, ICRP Publication 60, Ann. ICRP 21: No. 1-3, Pergamon Press, Oxford, UK, 1991.

USNRC, "Instruction Concerning Risks from Occupational Radiation Exposure," Regulatory Guide 8.29, Revision 1, February 1996. Committee on the Biological Effects of Ionizing Radiations, National Research Council, Health Effects of Exposure to Low Levels of Ionizing Radiation (BEIR V), National Academy Press, Washington, DC, 1990.

United Nations Scientific Committee on the Effects of Atomic Radiation, Sources and Effects of Ionizing Radiation, United Nations, New York, 1993. R. Doll and R. Wakeford, "Risk of Childhood Cancer from Fetal Irradiation," The British Journal of Radiology, 70, 130-139, 1997.

David Wiedis, Donald E. Jose, and Timm O. Phoebe, "The Rock and the Hard Place: Employer Liability to Fertile or Pregnant Employees and Their Unborn Children--What Can the Employer Do?" Radiation Protection Management, 11, 41-49, January/February 1994.

National Council on Radiation Protection and Measurements, Considerations Regarding the Unintended Radiation Exposure of the Embryo, Fetus, or Nursing Child, NCRP Commentary No. 9, Bethesda, MD, 1994.

National Council on Radiation Protection and Measurements, Risk Estimates for Radiation Protection, NCRP Report No. 115, Bethesda, MD, 1993.

National Radiological Protection Board, Advice on Exposure to Ionising Radiation During Pregnancy, National Radiological Protection Board, Chilton, Didcot, UK, 1998.

M.L. Thomas and D. Hagemeyer, "Occupational Radiation Exposure at Commercial Nuclear Power Reactors and Other Facilities, 1996," Twenty-Ninth Annual Report, NUREG-0713, Vol. 18, USNRC, 1998.

The program adheres to the Joint Review Committee on Education in Radiologic Technology (JRCERT) Standards for an Accredited Educational Program in Radiography.

Standards for an Accredited Educational Program in Radiography

Standard One: Accountability, Fair Practices, and Public Information
The sponsoring institution and program promote accountability and fair practices in relation to students, faculty, and the public. Policies and procedures of the sponsoring institution and program must support the rights of students and faculty, be well-defined, written, and readily available

Standard Two: Institutional Commitment and Resources
The sponsoring institution demonstrates a sound financial commitment to the program by assuring sufficient academic, fiscal, personnel, and physical resources to achieve the program's mission.

Standard Three: Faculty and Staff
The sponsoring institution provides the program adequate and qualified faculty that enable the program to meet its mission and promote student learning.

Standard Four: Curriculum and Academic Practices
The program's curriculum and academic practices prepare students for professional practice.

Standard Five: Health and Safety
The sponsoring institution and program have policies and procedures that promote the health, safety, and optimal use of radiation for students, patients, and the public.

Standard Six: Programmatic Effectiveness and Assessment: Using Data for Sustained Improvement
The extent of a program's effectiveness is linked to the ability to meet its mission, goals, and student learning outcomes. A systematic, ongoing assessment process provides credible evidence that enables analysis and critical discussions to foster ongoing program improvement.

*Please visit www.jrcert.org to review the Objectives that correspond to the Radiography Accreditation Standards 1-6.

Contact Information:

Accreditation: Joint Review Committee on Education in Radiologic Technology
20 North Wacker Drive, Suite 2850
Chicago, IL 0606-3182
(312)704-5300 www.jrcert.org

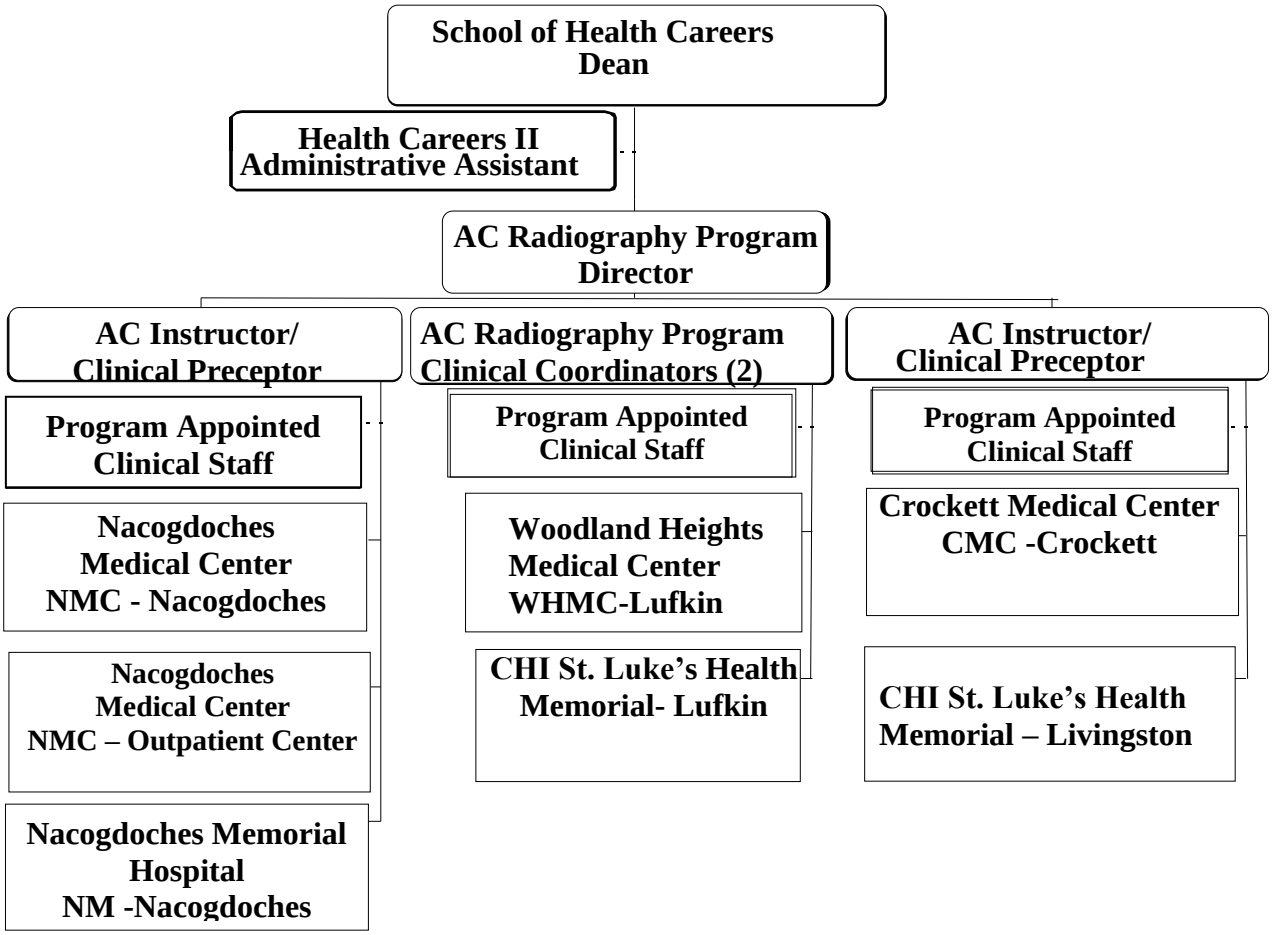
Curriculum: American Society of Radiologic Technologists
15000 Central Avenue, S.E.
Albuquerque, NM 87123-3909
(505) 298-4500 www.asrt.org

Certification: American Registry of Radiologic Technologists
1255 Northland Drive
St. Paul, MN 55120-1155
(651) 687-0048 www.arrt.org

ORGANIZATIONAL CHART

(Program)

ANGELINA COLLEGE
RADIOLOGIC TECHNOLOGY ORGANIZATIONAL CHART



Student Practicum Site Informed Agreement

I understand that student practicum placement is determined by the program faculty. Before graduating from the program, I could possibly rotate through all approved practicum sites.

The approved sites are: CHI Lufkin Memorial, CHI Livingston Memorial, Woodland Heights Medical Center, Crockett Medical Center, Nacogdoches Memorial Hospital, Nacogdoches Medical Center, and the NMC Outpatient Imaging Center.

In order to attend practicum, I will need to pass all site pre-clearance requirements and have a reliable means of transportation. All travel related expenses are my responsibility.

Note: If you live more **two hours** from any clinical site, please notify the program director. Students living more than two hours from a practicum site may not have to rotate to it.

Signature:_____ Date:_____

Print Name:_____

Clinical Syllabus Statement

Students enrolled in health careers programs at Angelina College must provide updated documents for required immunizations, titers and proof of current American Heart Association Basic Life Support CPR as required by all clinical sites.

Angelina College has no authority to dictate a site's requirements and no discretion to waive a clinical sites' requirements. Additionally, clinical sites are free to add, change, remove or otherwise alter their requirements at any time and all students are required to adhere to the revised site's requirements.

Failure to provide any documentation required by a clinical site will result in unexcused clinical absences and could result in dismissal from the program. For more information, please consult the clinical/practicum syllabus and health careers program student handbook for specific information on clinical absences and requirements.

Signature:_____ Date:_____

Print Name:_____