



RADIOLOGIC TECHNOLOGY PROGRAM



**Policies and Procedures
CLASS of 2019**



COLUMBUS TECHNICAL COLLEGE

**SCHOOL OF RADIOLOGIC TECHNOLOGY
DIVISION OF HEALTH SCIENCES and NURSING
928 Manchester Expressway
Columbus, Georgia 31904-6572**

STUDENT HANDBOOK

Clinical Affiliates:

Midtown Medical Center- Imaging Department	706-571-1054
Northside Medical Center- Imaging Department	706-494-2019
Jack Hughston Memorial Hospital Imaging Department	334-732-3057
St. Francis Hospital Imaging Department	706- 596-4000
Horizons Diagnostics Woodruff Rd. Location	706-321-9730

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Dean, Academic Affairs
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Policies and Procedures stated in this manual are subject to change without prior notice. Students will be notified of corrections, additions or deletions of policies as soon as possible.

Rev. 11/16/2017

PREFACE

Clinical affiliate sites are affiliated with the Program to enhance the program and the performance of enrolled students.

It should be understood that the requirement of maintaining this manual of stated policies and procedures of the Program may be required by any one or more of the following:

1. The Joint Review Committee on Education in Radiologic Technology (JRCERT) requires that all programs follow the Accrediting Standards for a program in Radiologic Technology.
2. The American Society of Radiologic Technologists (ASRT) formulates a suggested curriculum outline of academic instruction compatible with the scope of practice.
3. The American Registry of Radiologic Technologists (ARRT) has requirements and deadlines that must be met.
4. Columbus Technical College and the Clinical Affiliates and their Imaging Services Departments have requirements and regulations that must be followed.
5. The faculty of the program meets periodically to discuss the contents of this manual to meet the requirements of the above organizations.
6. The program's Advisory Committee meets at least twice per year, and more often if necessary, to discuss community issues related to the program and makes suggestions for changes.

CODE OF ETHICS

AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGISTS

1. The radiologic technologist acts in a professional manner, responds to patient needs, and supports colleagues and associates in providing quality patient care.
2. The radiologic technologist acts to advance the principal objective of the profession to provide services to humanity with full respect for the dignity of mankind.
3. The radiologic technologist delivers patient care and service unrestricted by the concerns of personal attributes or the nature of the disease or illness, and without discrimination on the basis of sex, race, creed, religion, or socio-economic status.
4. The radiologic technologist practices technology founded upon theoretical knowledge and concepts, uses equipment and accessories consistent with the purposes for which they were designed, and employs procedures and techniques appropriately.
5. The radiologic technologist assesses situations; exercises care, discretion, and judgment; assumes responsibility for professional decisions; and acts in the best interest of the patient.
6. The radiologic technologist acts as an agent through observation and communication to obtain pertinent information for the physician to aid in the diagnosis and treatment of the patient and recognizes that interpretation and diagnosis are outside the scope of practice for the profession.
7. The radiologic technologist uses equipment and accessories, employs techniques and procedures, performs services in accordance with an accepted standard of practice, and demonstrates expertise in minimizing radiation exposure to the patient, self, and other members of the healthcare team.
8. The radiologic technologist practices ethical conduct appropriate to the profession and protects the patient's right to quality radiologic technology care.
9. The radiologic technologist respects confidences entrusted in the course of professional practice, respects the patient's right to privacy, and reveals confidential information only as required by law or to protect the welfare of the individual or the community.
10. The radiologic technologist continually strives to improve knowledge and skills by participating in continuing education and professional activities, sharing knowledge with colleagues, and investigating new aspects of professional practice.

NETWORKING POLICY STATEMENT

The Radiology Departments/Imaging Services Departments of each clinical affiliate have functional policies which apply to the Staff and to the students of the Columbus Technical College School of Radiologic Technology. Because of the relationship between these departments and the School of Radiography, the School Staff and Students are expected to abide by the departmental policies of each affiliate clinical site (such as patient care, customer services, equipment operation, and fire, safety, and hazardous communications).

The School of Radiologic Technology Policy and Procedure manual (Student Handbook) is available for review to any prospective student interested in the program upon request. After official acceptance, these policies and procedures are given to the new class at their official orientation at the beginning of the program and explained by the Program Director and Clinical Coordinator. Applicable policies are again provided with further instruction and explanation in academic courses such as Introduction to Radiologic Technology and Patient Care, Radiographic Procedures, other courses taught within the Program.

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Section 1

Administrative / General Information

Mission Statement of Columbus Technical College

Columbus Technical College, a unit of the Technical College System of Georgia, is a two year public college which offers programs and services that support student and community success through the attainment of associate degrees, diplomas, technical certificates of credit, customized training, continuing, and adult education. The College supports the economic empowerment of its six county region by focusing on teaching and learning and developing a globally competitive workforce. We provide traditional, distance learning, and training experiences for career development and transfer.

The Technical College System of Georgia and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, sex, religion, disability, age, political affiliation or belief, genetic information, disabled veteran, veteran of the Vietnam Era, spouse of military member or citizenship status (except in those special circumstances permitted or mandated by law). This nondiscrimination policy encompasses the operation of all technical college-administered programs, programs financed by the federal government including any Workforce Innovation and Opportunity Act (WIOA) Title I financed programs, educational programs and activities, including admissions, scholarships and loans, student life, and athletics. It also encompasses the recruitment and employment of personnel and contracting for goods and services.

The Technical College System and Technical Colleges shall promote the realization of equal opportunity through a positive continuing program of specific practices designed to ensure the full realization of equal opportunity. The following person has been designated to handle inquiries regarding the nondiscrimination policies:

Title IX Coordinator: Pat Hood, Human Resources, 928 Manchester Expressway, Columbus, GA. 31904
706-649-1883 phood@columbustech.edu

Section 504 Coordinator: Pat Hood, Human Resources, 928 Manchester Expressway, Columbus, GA 31904
706-649-1883 phood@columbustech.edu

Reviewed and Revised 11/2016

Mission Statement of the Radiologic Technology Program

It is the mission of the Columbus Technical College School of Radiologic Technology to provide an education of excellence and high quality to qualified students in an environment that focuses on continuous quality improvement. In the academic and clinical setting, a curriculum is presented that provides the students opportunities to develop a mastery of subject matter, technical competency, ethical considerations, and problem-solving abilities. The education provided will foster cooperation, commitment, and individual student responsibility. The student scholar will be able to apply the knowledge attained toward successfully competing in the ever-changing health care environment.

AIMS AND PURPOSES OF THE PROGRAM

1. To develop the knowledge and skills of its students to become Radiologic Technologists who possess technical and ethical qualities enabling them to fulfill the responsibilities of this profession.
2. To meet the manpower needs of this profession as needed within the departments of Radiology at our clinically affiliated hospitals, as well as other hospitals, clinics, and imaging centers in the community and the region.
3. To improve patient care and radiographic quality rendered by students of this program.
4. To improve the clinical performance of students by close supervision of staff registered technologists, followed by weekly evaluations of their performance.
5. To have qualified instructors and supervisors to instruct the required curriculum and meet the stated educational objectives of this program.
6. To improve the academic instruction as the need arises in the technical improvements of Radiology.
7. To pursue financial assistance for students.
8. To instruct efficiently and effectively so that all students pass the national certification examination of The American Registry of Radiologic Technologists

Reviewed with No Revision 06/2016

Program Assessment Goals

- Goal 1.** Students/graduates will exhibit effective communication skills.
- Goal 2.** Students/graduates will be clinically competent for entry-level performance.
- Goal 3.** Students/graduates will exhibit effective critical thinking and problem solving skills.
- Goal 4.** Students/graduates will exhibit development of professional growth in attitudes, behavior, and ethics.

Program Effectiveness Data:

1. Students will pass the ARRT Certification on 1st attempt.
2. Students will complete program within 18 months once accepted.
3. Employers will be satisfied with graduates' performances.
4. Graduates will be satisfied with their education.
5. Graduates pursuing employment will be employed within 12 months post-graduation.

Program Statistics:

Program Completion Rate: 2017: 88% (15 of 17 students) 5 Year Rate: 89.6%
Program Completion Rate: 2016: 87% (13 of 15 students)
Program Completion Rate: 2015: 80% (12 of 15 students)
Program Completion Rate: 2014: 92.8% (14 of 15 students)
Program Completion Rate: 2013: 100%
ARRT Certification First Time Pass Rate (2013-2017): 89.2% (60 of 67 students)
Job Placement Rate (2013-2017) within 12 months – 97.5% (39 of 40 students)

**GENERAL INFORMATION
HOSPITALS AND DEPARTMENT OF RADIOLOGY
CLINICAL AFFILIATE SITES**

Midtown Medical Center (Columbus Regional Healthcare System)

The first city hospital was established in Columbus in 1841. In 1915, the city hospital was completed with additions in 1928, 1943, and 1956. When the 1956 expansion was completed, the name was changed from Columbus City Hospital to The Medical Center. Another expansion program began in 1965.

Ground was broken in 1980 for and \$40 million expansion which was opened for patient services in 1982. The Medical Center is now a complex with a 10-story patient tower (West Tower) and ancillary wings. Total bed capacity is 417. The name of the hospital was changed in 2014 to Midtown Medical Center.

The Imaging Department is located on the second level and contains 5 radiographic rooms. Two emergency radiographic rooms are located in the ER which is next to the main Imaging Department. The main department also has a filmless PACS (Picture Archival Computer System) system, the first in the healthcare community, with a combination of CR and DR radiographic equipment. A special procedures suite houses 2 rooms with modern and state-of-the-art angiographic equipment. The Cardiology Department houses two cardiac cauterization labs on the third level. The Imaging Department also has four portable x-ray machines (two of which are digital), six C-Arm machines, and one O-Arm machine. The Operating Room is also equipped with a vascular room with fixed radiography equipment.

The Imaging Services Department also contains Nuclear Medicine, Diagnostic Medical Sonography, MRI, and CT scanners.

The Radiation Oncology Department is housed in the John B. Amos Cancer Center at 1821 Fifth Ave. Radiation Oncology maintains the state of the art CT simulator, linear accelerators, the making of treatment blocks and image processing.

**Northside Medical Center (formerly known as Hughston Orthopedic Hospital)
(Columbus Regional Healthcare System)**

Northside Medical Center, which is located in North Columbus on Frist Court, was the dream of Dr. Jack Hughston, a Columbus orthopedic surgeon and a team physician to Auburn University's athletic teams. The hospital was planned and designed with the guidance of Jack C. Hughston, MD and Hospital Corporation of America (HCA). Charles H. Keaton, FACHE was the first hospital administrator. Initially, the name of the hospital was Hughston Sports Medicine Hospital, but was later changed to Hughston Orthopedic Hospital. It was opened on October 1, 1984 and contains 100 private patient rooms. It is the nation's first hospital designed to specialize in sports medicine related injuries and orthopedic disorders. In 2014, under the supervision of Columbus Regional Healthcare Systems, the hospital name was changed to Northside Medical Center.

The Imaging Department is located on the first floor across from the surgical suite and has two radiographic rooms for conventional radiography and fluoroscopy. The department has been updated recently and includes CR and DR imaging, and several mobile units and C-arm equipment. The department also contains a Nuclear Medicine room, Vascular Ultrasound, CT scanner and MRI unit.

In 2018, an Emergency Department will be added to the hospital for better emergency services to the North Columbus area.

Jack Hughston Memorial Hospital

Jack Hughston Memorial Hospital is located just across the Chattahoochee River on River Chase Drive in Phenix City, Alabama. The hospital opened in 2006 and was named Summit Hospital. In 2008, the name of the hospital was changed to Jack Hughston Memorial Hospital, due to a change in ownership. The Imaging Department is located on the first floor and has two radiography rooms, a CT scanner, a Sonography suite, and MRI unit. There are two portable units and three C-arm units for use in the Department, Emergency Room, Operating Room and on the patient care floors.

St. Francis Hospital

St. Francis Hospital is privately owned by LifePoint Health. The hospital is located at 2122 Manchester Expressway in Columbus. It is a general medical and surgical hospital with cardiac and women's health wings, recently added. St Francis has 376 patient beds and offers a full range of inpatient, outpatient, and emergency room services and is the only area hospital offering open heart surgery. The imaging department has two fluoroscopy rooms, two diagnostic rooms, and one digital room in the Emergency Room, as well as Computed Tomography, Nuclear Medicine, MRI, Cardiac Cath Lab and a Breast Health Center for Mammography. The department is also equipped with five portable machines, seven C-Arm fluoroscopy units, one O-arm, and one diagnostic room in the Cystoscopy room of the surgical suite.

Horizons Diagnostics

Horizons Diagnostics is located at 3934 Woodruff Road in Columbus. This is a family practice group of physicians' office. At this location there is one radiography room which utilizes digital CR imaging. Routine radiography suited for first and second semester students is performed at this site. New students gain expertise in those exams being studied and practiced in lab within the program.

SCHOOL OF RADIOLOGIC TECHNOLOGY HISTORY

The Medical Center School of Radiologic Technology had its beginning in 1952 sponsored by The Medical Center, which at that time was known as the Columbus City Hospital. Later, when the name of the hospital changed, the name of the school became The Medical Center School of X-Ray Technology. The school began under the direction of Dr. George L. Epps as Medical Director and Miss Jacquelyn Wester as Chief Technologist. In the beginning, the school was a one year program until July of 1960 when it became a two year program as required by accreditation from the Joint Review Committee on Education in X-Ray Technology. Under the direction of Dorothy R. Freeman, in January of 1967, The Medical Center School and the St. Francis School were combined into one school, and, at the time, the name was changed to The Medical Center-St. Francis School of Radiologic Technology. The St. Francis School had opened in 1951. From 1970 to 2003 the program was under the direction of Ms. Ruby Montgomery. The name of the school was changed again in 1983 to The Medical Center School of Radiologic Technology after separation from Saint Francis and in meeting with accreditation recommendations and requirements.

After the retirement of Ms. Ruby Montgomery in May 2003, the program became under the direction of Mrs. Patricia Mansell. In October 2003, the program transitioned to Columbus Technical College. The Medical Center School name was changed to Columbus Technical College School of Radiologic Technology. In 2014, after the retirement of Mrs. Patricia Mansell, the program director changed to Mrs. Martha Dollar, who had been the Clinical Coordinator under Mrs. Mansell's direction. The Clinical Coordinator of the program is now Kimberly Whitaker.

PHYSICAL FACILITIES/LOCATION:

Through the years, the school has progressed from having no assigned physical space with classes being held in various radiographic rooms to being assigned classroom space in the Whiteside building, adjacent to The Medical Center and formerly occupied by the nursing program. In December 1990, the school was assigned a newly renovated 3,000 sq. ft. building located on Center Street adjacent to The Medical Center. The building provided four offices, a library, and two classrooms. In October of 2003, the school moved to Columbus Technical College in Carl Patrick Hall at 928 Manchester Expressway, where classroom facilities were available for academic instruction. The Medical Center Imaging Department still maintained lab facilities for the program until September 2010 when the program moved to the new Health Sciences Center (Robert L. Wright Health Sciences Building) on River Road. The new building houses lab facilities for the program on the second floor, with 1 radiographic room, one C-Arm, and one Portable X-ray machine, donated to the program by Midtown Medical Center. Classroom facilities are available for all classes of the program in the Health Sciences Building.

CLINICAL AFFILIATES:

Midtown Medical Center – 710 Center Street, Columbus, GA
Northside Medical Center – 100 Frist Court, Columbus, GA
Jack Hughston Memorial Hospital – 4401 River Chase Dr., Phenix City, AL
St. Francis Hospital – 2122 Manchester Expressway, Columbus, GA
Horizons Diagnostics, LLC – 3934 Woodruff Road, Columbus GA

PERSONNEL:

CTC Program Director: Martha Dollar, MPA, RT (R) ARRT

CTC Clinical Coordinator: Kimberly Whitaker, MSM, RT(R) ARRT

Clinical Instructors (Affiliate Sites):

Midtown Medical Center – Barbara Weaver, RT (R); Amanda Wanzer, RT (R)

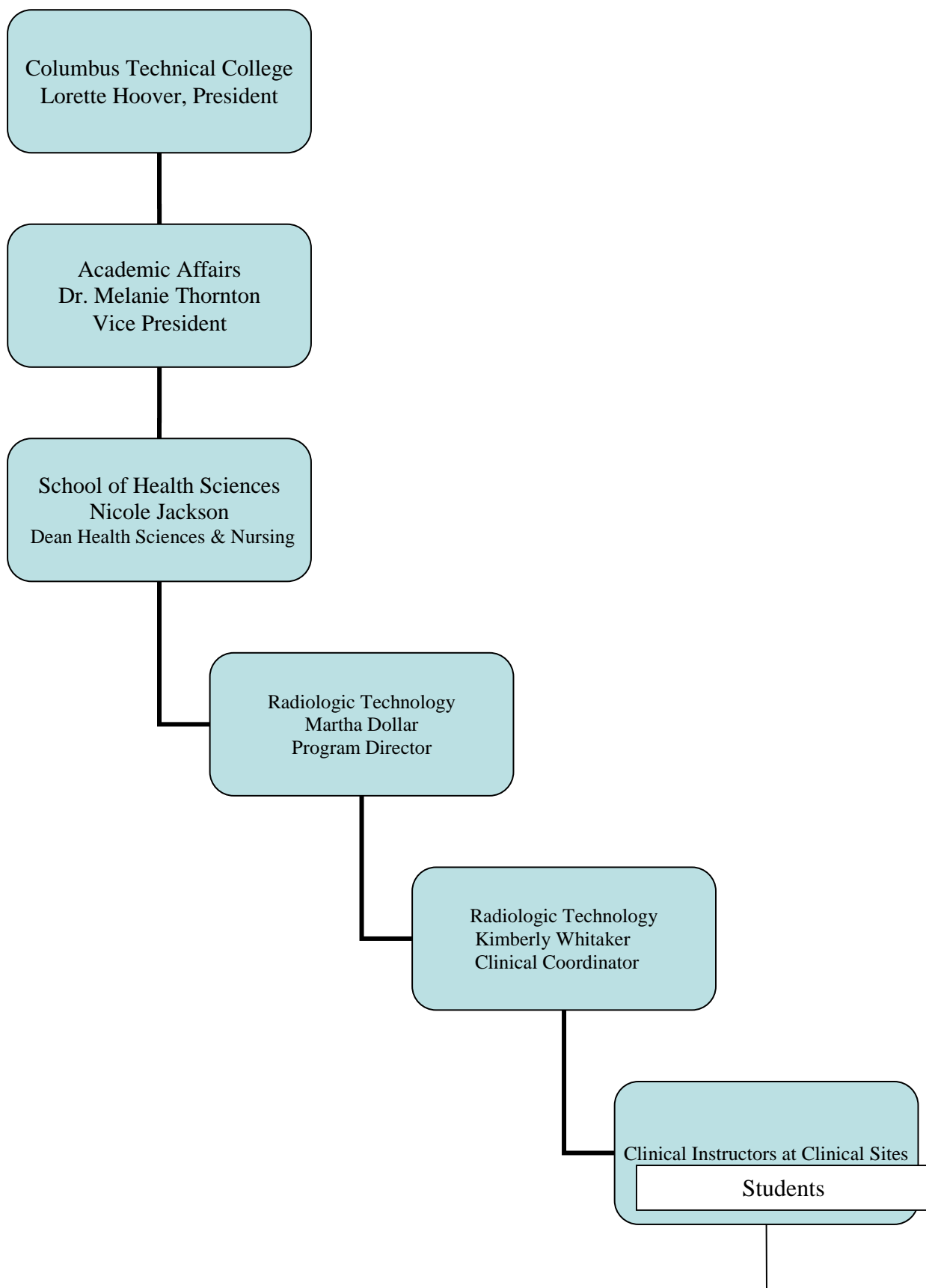
Northside Medical Center – Susan Fulone, RT (R)(U)

Jack Hughston Memorial Hospital – Justin Hanna, RT (R)

St. Francis Hospital – Kim Foster, RT(R)

Horizons Diagnostics – Lisa McDowell Williams, RT(R)

**TABLE OF ORGANIZATION
COLUMBUS TECHNICAL COLLEGE
SCHOOL OF RADIOLOGIC TECHNOLOGY**



ADVISORY INTERACTIONS

Statement: The Standards of an Accredited Educational Program for Radiologic Technology suggest the establishment of communication and interactions via Advisory Groups or Committees for the effectiveness of the Program. Various individuals, departments, or groups within Columbus Technical College, our clinical affiliates, and within the community are scheduled to meet at least twice a year for these advisory purposes.

Person responsible for establishing the meetings: Program Director

Purpose: To provide advisement to the Program Director, Faculty, and Staff.

Suggested Advisement Topics and other as requested by the Program Director:

1. Manpower needs and human resources issues
2. Admissions and related criteria
3. Input to curriculum content
4. Review of surveys conducted
5. Review of course evaluations
6. Policies and Procedures of the Program
7. Recruitment methods
8. Review of Program Effectiveness Data and Student Learning Outcomes

Meeting dates: Meetings are held twice per year in the Spring and the Fall or as otherwise deemed necessary.

Documentation: Meeting agendas and notes are recorded and retained in file in the Program office and in the Office of Academic Affairs.

Committee Members:

Clinical Instructors

Committee Recording Secretary

Other members as determined appropriate by the Program

Administrators from hospitals and area imaging centers

Representatives from radiology departments

Radiologists

Members of Healthcare Community

Members in Post-Secondary Educational Roles

Former Graduates of the Program

Program Director

Clinical Coordinator

ADMISSION REQUIREMENTS

Admission to the Radiologic Technology (RT) program is competitive and occurs once per year in Fall semester for Spring semester acceptance. The program offers an equal opportunity to students regardless of race, creed, color, sex, age, religion, or national origin. Applications to the college are available from the Columbus Technical College Admissions Office (and on the college website) and are accepted post high school graduation or with a GED diploma. With completion of pre-requisite courses for entry into the program, the competing student can access forms for competitive acceptance on the Columbus Technical College website, under the Academics/Programs of Study/Division of Health Sciences and Nursing/Division of Health Sciences and Nursing Course Catalog/Radiologic Technology link.

The process consists of three phases as follows:

Phase I: Admission to Healthcare Science Associate Degree major with Radiologic Technology (RADT) declared as program of intent or admission to any general degree major offering the required prerequisite courses.

All applicants, including transfer students, who complete the prerequisite courses of BIOL 2113 with Lab, BIOL 2114 with Lab, ALHS 1090, MATH 1111, ENGL 1101, and PSYC 1101 with a C or higher, and who meet admission requirements, will be considered. In addition to the pre-requisites listed above, students must also have completed their Humanities elective and their Speech course by the end of Fall semester prior to Spring acceptance. All pre-requisite courses must be completed by the end of Fall semester prior to Spring semester of the year in which admission to the Rad Tech program is desired. Students must also have Compass or Accuplacer Reading (79 minimum for Compass and 64 minimum for Accuplacer) and Writing/Sentence Skills (62 minimum for Compass and 70 minimum for Accuplacer) scores that are no more than five years old at the time of competition. Anatomy & Physiology courses can be no older than seven (7) years.

Transfer students who wish to compete for admission should contact the Admissions Office at least two semesters prior to Fall semester to establish their status.

Applicants may be admitted to Healthcare Science Degree or a degree major in any semester, however, admission prior to Fall semester *does not guarantee* admission to the Rad Tech program. Admission to the Rad Tech program is competitive, and is limited in the number of students per year/class.

At this time, the program takes 15 students per admission.

Students with provisional admission status will not be considered for admission to the RT program.

Phase II: Admission to the Radiologic Technology Program

To meet minimum requirements for consideration for admission, the applicant must:

1. Be 18 years of age or older at the beginning of clinical instruction (first semester into the program).
2. Be in good health by evidence of medical evaluation from a physician.
3. Be a high school graduate or GED recipient.
4. Meet **regular program admission status requirements** for admission to Columbus Technical College; **students with provisional program admission status will not be considered.**
5. Make a grade of C or higher in all prerequisite courses.
6. Have the following documents sent directly to the Columbus Technical College Admissions Office:
 - Official high school transcript that documents completion of graduation requirements or GED
 - Official transcripts of all course work taken at regionally accredited institutions of higher learning

- Official report of COMPASS/Accuplacer scores. **Equivalent SAT or ACT scores are acceptable to enter the college, however, COMPASS/Accuplacer Reading and Writing/Sentence Skills must be taken prior to application for the Radiologic Technology program, as this is one of the requirements for admission into the program.**
7. Submit the following to the Division of Health Sciences and Nursing Department in the Robert L. Wright Health Sciences Building, 3rd Floor Admin. Suite by October 1 during Fall semester prior to the year in which admission to the program is sought:
- Letter of Intent
 - Personal Data Form
 - Signed copy of the Technical Standards Form for Radiologic Technology
 - A satisfactory medical exam form, current CPR card, background check and drug screening will be required **once the applicant is accepted** and prior to attending clinicals at scheduled sites. **DO NOT submit with your application.**

All forms are found on the college website: www.columbustech.edu. Click on Academics; Programs of Study; then Division of Health Sciences and Nursing on the left side of the page, and click on Forms in the list in the middle of the page. **All students** accepted into the Radiologic Technology Program must be able to meet the physical and technical requirements necessary for the course of study.

Phase III: Selection

Selection of applicants for admission to the program occurs at the end of Fall semester each year, once Fall grades have been posted. Students are allowed to be in pre-requisite classes during the Fall semester prior to Spring acceptance. The process is competitive, based on student performance in pre-requisite courses and COMPASS/Accuplacer scores. Students are notified by letter of acceptance into the program and are notified that acceptance is contingent upon successful completion of Level 1 Background Check and Drug Screening required by the clinical sites. These forms are accessible in the Admin Suite on 3rd floor of the Health Sciences Building. Students are also required to be certified in Basic First Aid and CPR (through American Heart Association) prior to entry into the program. Students may obtain certification through Columbus Technical College Economic Development department or through completion of the Introduction to Healthcare (ALHS 1040) course at Columbus Technical College. Check college website for dates/times. There are also various community offerings for BLS certification, however, the student must check to be sure it is certification through American Heart.

STATEMENT REGARDING STUDENT ENROLLMENT

As stated in the Mission Statement and in various sections of the Student Handbook, Columbus Technical College School of Radiologic Technology provides an educational program according to required Accreditation Standards. It shall be understood by enrolled students that neither the school nor any of its affiliate clinical sites will be obligated to provide wages for any time enrolled as a student. And further, the Program's clinical radiographic rotations do not constitute an employer/employee relationship, and are strictly for education to benefit the enrolled student.

TECHNICAL STANDARDS/ESSENTIAL REQUIREMENTS POLICY

Students must be able to meet the physical and technical and essential requirements necessary for the course of study in Radiologic Technology. The physical and technical requirements are:

I. The Radiologic Technologist must have sufficient strength, motor coordination and manual dexterity to:

- _____ 1. Transport, move, lift and transfer patients from a wheelchair or stretcher to an x-ray table or to a patient's bed;
- _____ 2. Move, adjust and manipulate a variety of radiographic equipment, including the physical transportation of mobile radiographic machines, in order to arrange and align the equipment with respect to the patient and the image receptor according to established procedure and standards of speed and accuracy; and,
- _____ 3. Stand and/or walk 6 to 8 hours per day without the aid of walker, crutches, wheelchair, etc.

II. The Radiologic Technologist must be capable of:

- _____ 1. Handling stressful situations related to technical and procedural standards and patient care situations; use critical thinking skills;
- _____ 2. Providing physical and emotional support to the patient during radiographic procedures, being able to respond to situations requiring first aid and providing emergency care, including CPR to the patient in the absence of or until the physician arrives;
- _____ 3. Communicating verbally in an effective manner in order to direct patients during radiographic examinations to include hearing and oral communications with patients and staff, and, work effectively in groups, and independently;
- _____ 4. Tactile ability to perform palpation for positioning and performing tasks such as insertion of enema catheters;
- _____ 5. Reading and interpreting notes, records, textbooks, patient charts and requisitions for radiographic examinations.
- _____ 6. Visual ability to differentiate the color spectrum for color coding of patient files, the visual acuity to assess radiographic images and adequate depth perception to safely align equipment with patient position. Observe and discern changes in physical conditions and the environment.

III. The Radiologic Technologist must have the mental and intellectual capacity to:

- _____ 1. Calculate and select proper technical exposure factors according to the individual need of the patient and the requirements of the procedure's standards of speed and accuracy; and,
- _____ 2. Review and evaluate the recorded images on radiographs for the purpose of identifying proper patient positioning, accurate procedural sequencing, proper radiographic exposure and other appropriate and pertinent technical qualities.
- _____ 3. Operate a computer.

COMPLIANCE WITH TECHNICAL STANDARDS:

Students must be able to meet the physical and technical requirements necessary for the course of study in Radiologic Technology. An applicant who is considered, in the judgment of the Program Faculty, to be unable to meet the physical or technical standards of the Program must show verification of compliance with the standards in order to be considered for admittance and/or continuance in the Program.

VERIFICATION STATEMENT:

Do you have any physical or mental disabilities/handicaps that would interfere with the satisfactory performance of the TECHNICAL STANDARDS identified above?

Yes _____ No _____

I have read and understand the **TECHNICAL STANDARDS** policy of Columbus Technical College Radiologic Technology Program.

Signature _____ Date _____

Witness _____ Date _____

Reviewed 11/20/2017

FINANCIAL ASSISTANCE INFORMATION

The Columbus Technical College School of Radiologic Technology is very interested in providing information to students and candidates interested in our program.

Students who are interested in applying for financial assistance opportunities should consult with the Financial Aid Office of Columbus Technical College.

Other financial assistance may be available to candidates that are accepted and enrolled in the program. Please consider the following:

1. Candidates should contact any of the following: if a member or family member is associated with the Girl or Boy Scouts, Girls or Boys Club, Kiwanis Club, American Business Women's Associations in their area for possible scholarships.
2. Local or area church or church ministry organizations, such as Episcopal, Catholic, Lutheran, Baptist, Methodist, etc.
3. If of a different culture, other than Caucasian or American, contact special minority groups or organizations. Examples: Indian, Native American, Asian, Korean, etc.
4. If you reside in rural areas where there are small hospitals or physicians clinics, contact these for possible scholarships to be repaid after completion of the program through employment.
5. Rural hospital auxiliaries, medical foundations, medical societies may award scholarships.
6. Many companies and corporations where family members are employed have scholarship programs.
7. For residents in the Columbus area, contact Midtown Medical Center (571-1000) and St. Francis Hospital (596-4000) Auxiliaries for possible scholarship information.
8. Check bookstores at public shopping malls for purchase of books on available educational scholarships and loans.
9. If family members are enrolled: (write) National Guard of Georgia, Scholarship Fund, National Guard Assoc. of Georgia Ins. Trust, 1731 Commerce DR., Suite 120, Atlanta, GA, 30318
10. If a family member is employed with large corporations, scholarships may be available for their children
11. Educational benefits which are provided for service members, spouses, and surviving family members should contact their VA counselor in the Financial Aid Office.

The following scholarship information is provided or available to all students **after acceptance and enrollment in the RT program**. Information and application is available through Columbus Technical College School of Radiologic Technology:

1. The Columbus Technical College Foundation manages the Fred Aranas Memorial Scholarship. This scholarship is managed by the Columbus Technical College Foundation. The scholarship is a self-perpetuating fund which was established in the Spring of 1989 by Radiology Associates, P.C. of Columbus and continued by Catarina Aranas, MD and the sister of Dr. Aranas, to honor the memory of her husband. Officially accepted candidates who wish to obtain an application for one of these scholarships must see a program official. The Aranas Scholarships are available only to students enrolled in the School of Radiologic Technology at Columbus Technical College. These scholarships are awarded annually per semester for 3 semesters. Each awarded scholarship is approximately \$1500 for the program as funding is available. Funds are split by semester. The determination of the number of scholarships awarded and the amount of the scholarship are determined each year by The Columbus Technical College Foundation and Dr. Aranas.

2. Candidates must have maintained at least a B (3.0) average in previous radiographic related academic work and a minimum of 80 in clinical performance to continue to receive the scholarship each semester. Candidates may be asked to meet for a personal interview with the scholarship committee, if requested. This committee is appointed by the Columbus Technical College Foundation.
3. Columbus Technical College Foundation also offers the Robert Jones Scholarship/Grant and the Austel Baker Scholarship for Health Science students. The student wishing to apply for further scholarships through the Foundation should contact the Foundation Office at 706-649-1199.
4. The Columbus Regional Medical Center Volunteer Auxiliary sponsors the Mary Ann Pease Health Care Field Scholarship. Officially accepted candidates may obtain an application from the Auxiliary office at Midtown Medical Center. Candidates may contact the program office for direction and further information regarding the Auxiliary.
5. The Columbus Society of Radiologic Technologists (CSRT) may award scholarships to officially accepted candidates into the program. When available, the number and amount of scholarships is determined by the CSRT. Candidates may contact the program office for further information.
6. The Georgia Society of Radiologic Technologists, Inc, (GSRT) may award scholarships, when funds are available. Officially accepted candidates may contact the program office for further information or on the web at www.gsrt.org.
7. The American Society of Radiologic Technologists (ASRT) also offers scholarships. You may find more information on their website: www.asrt.org.

Section 2

Academic Education

ACADEMIC FACULTY

Faculty Member

Course and Credit Hours

Martha Dollar, MPA, RT(R) ARRT

RADT 1075 Radiographic Imaging (4)
RADT 1085 Radiographic Equipment (3)
RADT 1200 Radiation Biology and Protection (2)
RADT 2260 Radiologic Tech. Review (3)
RADT 2340 Clinical Radiography II (7)
RADT 2360 Clinical Radiography IV (9)

Kimberly Whitaker, MSM, RT(R)

RADT 1010 Intro. To Rad. Tech (4)
RADT 1030 Radiographic Procedures I (3)
RADT 1060 Radiographic Procedures II (3)
RADT 1065 Radiologic Science (2)
RADT 1320 Clinical Radiography I (4)
RADT 1330 Clinical Radiography III (6)
RADT 2090 Radiographic Procedures III (2)

ACADEMIC FACULTY INSTRUCTION LOADS

In order to facilitate lesson planning, administrative responsibilities, research, counseling, clinical observation, and other duties, the instructional assignment is planned, coordinated, and scheduled by Columbus Technical College and the Program Director to balance with assigned clinical and academic assignments.

CLINICAL SUPERVISION

Clinical Instructors, Staff Technologists of the clinically affiliated hospitals/clinics, with the assistance of the Clinical Coordinator and/or Program Director, instruct students during Clinical Radiography (RADT 1320-2360). Clinical instructors are paid by their facilities with duties of managing student radiographers added to their responsibilities. No clinical instructors or radiographers working with students are paid from college funds, unless hired by the college to give didactic course instruction.

COLUMBUS TECHNICAL COLLEGE
School of Health Sciences
RADIOLOGIC TECHNOLOGY COURSE SEQUENCE
Semester System- 6 Semester
As of 01/01/2016

Semester	Course	Description	Contact Hours Lec Lab	Credit Hours
Prerequisites	SEM N 1000	First Semester Seminar	1	-
	BIOL 2113 w Lab	Anatomy & Physiology I	3 1	4
	ENG 1101	Composition & Rhetoric	3	3
	AHS 1090	Medical Terminology	2	2
	PSYC 1101	Psychology	3	3
		Total	12	12
Prerequisites	BIO 2114 w Lab	Anatomy & Physiology II	3 1	4
	MATH1111	College Algebra	3	3
	HUM 1101	Humanities Elective	3	3
	SPCH 1101	Speech	3	3
		Total	13	13
	1 st Semester Spring	RADT 1010 RADT 1030 RADT 1320 RADT 1075	Introduction to Radiologic Technology Radiographic Procedures I Clinical Radiography I Radiographic Imaging	3 1 2 1 4 4 4
		Total	15	15
2 nd Semester Summer	RADT 1060 RADT 1330 RADT 1065	Radiographic Procedures II Clinical Radiography II Radiologic Science	2 1 7 2	3 7 2
		Total	12	12
3 rd Semester Fall	RADT 2090 RADT 2340 RADT 1085 RADT 1200	Radiographic Procedures III Clinical Radiography III Radiographic Equipment Radiation Biology/Protection	1 1 6 3 2	2 6 3 2
		Total	13	13
4 th Semester Spring	RADT 2360 RADT 2260	Clinical Radiography IV Radiologic Technology Review	9 3	9 3
		Total	12	12
Total			77	77

COURSE DESCRIPTIONS

RADT 1010- INTRODUCTION TO RADIOLOGIC TECHNOLOGY

Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Provides the student with an overview of radiography and patient care. Students will be oriented to the radiographic profession as a whole. Emphasis will be placed on patient care with consideration of both physical and psychological conditions. Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: Topics include: ethics, medical and legal considerations, “Right to Know Law”, professionalism, basic principles of radiation protection, basic principles of exposure, equipment introduction, health care delivery systems, hospital and departmental organization, hospital and technical college affiliation, medical emergencies, pharmacology/contrast agents, media, OR and mobile procedures patient preparation, death and dying, body mechanics/transportation, basic life support/CPR, and patient care in radiologic sciences.

RADT 1030- Radiographic Procedures I

Introduces the knowledge required to perform radiologic procedures applicable to the human anatomy. Emphasis will be placed on the production of quality radiographs, and laboratory experience will demonstrate the application of theoretical principles and concepts. Topics include: introduction to radiographic procedures; positioning terminology; positioning considerations; procedures, anatomy, and topographical anatomy related to chest and abdomen cavities, bony thorax, upper extremities, shoulder girdle; and lower extremities. Pathology of these structures is also reviewed.

RADT 1060- Radiographic Procedures II

Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the pelvic girdle; anatomy and routine projections of the spine, gastrointestinal (GI) procedures; genitourinary (GU) procedures; biliary system procedures; and minor procedures. Pathology related to these structures is also reviewed.

RADT 1065- Radiologic Science

Content is designed to establish a basic knowledge of atomic structure and terminology. Also presented are the nature and characteristics of x-radiation, ionizing and non-ionizing radiation; the properties of x-rays and the fundamentals of x-ray photon interaction with matter..

RADT 1075- Radiographic Imaging

The content of this course introduces factors that govern and influence the production of the radiographic image using analog and digital radiographic equipment found in diagnostic radiology. Emphasis will be placed on knowledge and techniques required to produce high quality diagnostic radiographic images. Topics include: Image quality (radiographic density, radiographic contrast, recorded detail, distortion, grids, image receptors and holders (analog and digital), processing considerations (analog and digital), image acquisition (analog, digital), image analysis, image artifacts (analog and digital). Guidelines for selecting exposure factors and evaluating images within a digital system will assist student to bridge between film-based and digital imaging systems. Factors that impact image acquisition, display, archiving and retrieval are discussed.

RADT 1085- Radiographic Equipment

Content establishes a knowledge base in radiographic, fluoroscopic, and mobile equipment requirements and design. The content also provides a basic knowledge of Automatic Exposure Control (AEC) devices, beam restriction, filtration, quality control and quality management principles of analog and digital systems. Laboratory experiences will demonstrate applications of theoretical principles and concepts. Content is designed to provide entry-level radiography students with principles related to computed tomography (CT) imaging, and other imaging modalities (eg, MRI, US) in terms of purpose, principles, equipment/material, and procedure. Outside speakers will share their knowledge of the various modalities within the realm of radiologic technology. A discussion of Patient Archiving Communication Systems (PACS) is also reviewed and discussed.

RADT 1200- PRINCIPLES OF RADIATION BIOLOGY AND PROTECTION

Provides instruction on the principles of cell radiation interaction. Radiation effects on cells and factors affecting cell response are presented. Acute and chronic effects of radiation are discussed. Topics include: radiation detection and measurement; patient protection; personnel protection; absorbed dose equivalencies; agencies and regulations; introduction to radiation biology; cell anatomy, radiation/cell interaction; and effects of radiation.

RADT 2090- Radiographic Procedures III

Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the cranium; anatomy and routine projections of the facial bones; anatomy and routine projections of the sinuses; special radiographic procedures, and pathological considerations of the cranium, facial bones, sinuses and special procedures. Pathology and disease as they relate to various radiographic procedures are discussed with emphasis on radiographic appearance of disease and impact on exposure factor selection. Topics include: fundamentals of pathology, trauma/physical injury, and systematic classification of disease.

RADT 2260- Radiologic Technology Review

Provides an opportunity for review of basic knowledge from previous courses and helps the student prepare for national certification examinations for radiographers. Topics include: image production and evaluation; radiographic procedures; anatomy, physiology, pathology, and terminology; equipment operation and quality control; radiation protection; and patient care and education.

RADT 1320- CLINICAL RADIOGRAPHY I

Introduces students to the hospital clinical setting and provides an opportunity for students to participate in or observe radiographic procedures. Topics include: orientation to hospital areas and procedures; orientation to mobile/surgery; orientation to radiography and fluoroscopy; participation in and/or observation of procedures related to body cavities, the shoulder girdle, and upper and lower extremities. Activities of students are under direct supervision.

RADT 1330- CLINICAL RADIOGRAPHY II

Continues introductory student learning experiences in the hospital setting. Topics include: equipment utilization; exposure techniques; attend to and/or observation of routine projections of the lower extremities, pelvic girdle, and spine; attend to and/or observation of procedures related to the gastrointestinal (GI), genitourinary (GU), and biliary systems; and attend to and/or observation of procedure related to minor radiologic procedures. Execution of radiographic procedures will be conducted under direct and indirect supervision.

RADT 2340- CLINICAL RADIOGRAPHY III

Provides students with continued hospital setting work experience. Students continue to develop proficiency in executing procedures introduced in Radiographic Procedures. Topics include: patient care; behavioral and social competencies; performance and/or observation of minor special procedures, special equipment use, and participation in and/or observation of cranial and facial radiography. Execution of radiographic procedures will be conducted under direct and indirect supervision.

RADT 2360- CLINICAL RADIOGRAPHY IV

Provides students with continued hospital setting work experience. Students demonstrate increased proficiency levels in skills introduced in all of the radiographic procedures courses and practiced in previous clinical radiography courses. Topics include: patient care; behavioral and social competency; advanced radiographic anatomy; equipment utilization; exposure techniques; sterile techniques; integration of procedures and/or observation of angiographic, interventional, minor special procedures; integration of procedures and/or observation of special equipment use; integration of procedures and/or observation of routine and special radiographic procedures; and final completion of all required clinical competencies. Execution of radiographic procedures will be conducted under direct and indirect supervision.

TEXTBOOKS

Latest edition of each of the following:

1. Ballinger, P.; Merrill's Atlas of Radiographic Positions and Radiologic Procedures
2. Bushong, Stewart; Radiologic Science for Technologists
3. Taber's Cyclopedic Medical Dictionary, FA Davis Company
4. Carlton, R & Adler, A.; Principles of Radiographic Imaging
5. Statkiewicz, M.; Radiation Protection in Medical Radiography
6. DeVos, D.; Basic Principles of Radiographic Exposure
7. Adler, A. & Carlton, R.; Introduction to Radiography and Patient Care
8. Kath, Kathleen; Pocket Reference to Radiographic Exposure Techniques
9. Ballinger, P.; Pocket Guide to Radiography
10. Carter, C & Veale, B.; Digital Radiography and PACS
11. Fauber, Terri L.; Radiographic Imaging & Exposure
12. Corectec Radiography Review Online and Elsevier/Mosby EVOLVE Radiologic Online Modules
13. Biedrzycki, A., The Radiography Procedure and Competency Manual, 2nd Ed. FA Davis

ACADEMIC CLASSROOM POLICIES

The following standards and policies are **MANDATORY** for **ALL** classes in this program:

1. Uniforms must be worn by all students when reporting to class after clinicals. Should a student be attending class but have clinical time off for any reason, they must abide by the following:
 - Shoes **must** be worn in class
 - **No** halters or tank tops shall be worn to class
 - **No** short shorts/gym shorts or beachwear shall be worn to class
 - Jeans/slacks/pants are allowed as long as they are not frayed or torn in any way. An appropriate top/shirt that covers appropriate areas should be worn to the college for class.
 - Students are subject to being sent home if not in appropriate attire.
2. Students must be prompt to class. Tardiness will not be tolerated. See Columbus Technical College Student Handbook.
3. Talking to classmates during class will not be tolerated. Passing notes between students during class must not occur. Students are expected to show respect for all instructors.
4. All cell phones brought into the classroom must be inaudible or the student will be requested to leave the classroom and will be counted as absent. Any contacts needed for the student in case of emergency during class may be handled through the School of Health Sciences office (706-225-0502), or the Program Office at 706-225-0505 or 706-225-0514. Students may be asked to leave their cell phones on the instructor's desk during testing.
5. As per CTC regulations, drinks and food are not permitted in the classroom or lab. All eating shall be done during break in specified areas. There is a Student Center on the first floor of the Robert L. Wright Health Sciences Building for convenience with snack and drink machines available.
6. Feet shall not be propped on desks and no school property shall be defaced. Defacing of school property is grounds for dismissal from the college and the program.
7. Sleeping in class will not be tolerated. Students found sleeping shall be warned on the first offense. On the second offense, the student will be asked to leave class. On the third offense, the student will be requested to meet with the instructor and the Program Director/Dean of Health Sciences. Further action will be taken as necessary.
8. Columbus Technical College is a smoke-free campus and smoking is not permitted in or on school facilities. There is also a No Smoking policy at all affiliate clinical sites and their properties. Students **MUST NOT** smoke anywhere on these campuses, not even in their cars. Smoking on campus or on clinical site property is grounds for dismissal. This includes E-cigarettes.
9. Use of profanity is unacceptable and will not be tolerated.

Classes: The program is planned on a definite schedule in order that the student will obtain the proper ratio of clinical and academic experiences. Students are required to maintain a C average in each academic course each semester and a B average is required in clinical courses to be able to advance in the program. Attitude and cooperation will also be taken into consideration and the student will receive a Work Ethics grade in each course and also an employability grade.

TESTS

Tests: Examinations are given throughout each didactic course's progress. The type of examinations administered is at the discretion of the instructor. At the end of all courses, comprehensive final exams are given. There will not be any make-up exams given for a previously failed exam. Any recommendations shall be determined by the Program Advisory Committee. Should a student be absent from an examination, she/he must consult the instructor to discuss the possibility of a makeup exam. Generally, if a test is missed, the score made on the final exam will be used for the score of that test.

Guest Lecturers: Radiologists, Radiologic Technologists and technical representatives of commercial companies will sometimes present lectures or classes. These lectures are part of the formal education and exams may be given on material presented.

ACHIEVEMENT INCENTIVE PROGRAM

PURPOSE: To promote and support excellence in performance and skills as evidenced in the cognitive, psychomotor and affective domains.

Students may qualify for this program during the following semesters of attendance while enrolled in the Radiologic Technology Program through community service project participation activities. Verification of participation must be obtained through the specific organization, noting the number of hours volunteered, the date of the event, and the activity, and signed by a representative of the organization. This verification should be turned in for credit to the program office.

1. 1st Semester
2. 2nd Semester
3. 3rd Semester

BASIC CRITERIA FOR AIP (other than Community Service) –

1. Maintain perfect attendance for the semester
2. Minimum academic average of 90 for the semester
3. Minimum clinical average of 90 and above average performance
4. No record of disciplinary action, incompletes, lost time cards, or film badges, and NO absences or tardies.
5. Affective domain evaluations exhibit positive attitude

AWARD –One day (up to 7 hours) off from Clinical Schedule- available to be observed on a weekday and requested, preferably, one week in advance (if not possible, at least 24 hours in advance). **These days cannot be used to make up absences.**

NOTE: The Program reserves the right to evaluate the Achievement Incentive Program with each semester to determine changes if necessary.

STUDENT ADVISEMENT FOR ACADEMIC COURSE PREPARATION

1. Recommend students study and challenge the objectives at the beginning of each chapter in the pertinent textbook(s) for the course or section of study.
2. Recommend the pre-reading of assigned or suggested reading prior to the lecture(s) be performed by the student.
3. Student being present for lecture(s) is required and very important for successful achievement.
4. Students should take adequate notes during the lecture. Maintain all handouts provided by the instructor.
5. BRING the required textbook(s) to class and utilize as instructed. Sharing a textbook in class with a classmate is distracting and is discouraged.
6. Students should ask pertinent questions when further interpretation is needed. If questions are not verbalized during the lecture, the instructor should be approached immediately at the conclusion of the lecture. If a question should arise later and an appointment is needed with the instructor, please allow an appropriate amount of time for the instructor to satisfactorily work in to their schedule. REMEMBER – an emergency on your part (or inappropriate planning), does NOT constitute an emergency on the instructor's part. Instructors do welcome your inquiries.
7. Students should perform the post-reading of the assigned or suggested reading as indicated from the course syllabus or as further advised by the instructor.
8. Self-preparation to achieve satisfactory course content knowledge is the required responsibility of the student. This may require a combination of activities in order to perform satisfactorily.
9. The study of lecture material should take place daily and immediately after the lecture. An appropriate amount of time should be allowed in the scheduling plan of the student to address all topics. The appropriateness of scheduling study time should address the quantity and quality of time. Also, the materials needed and quality of the student's environment should be addressed. Last minute cramming is poor preparation and is NOT recommended.

STUDENT ADVISEMENT FOR COURSE EXAMINATIONS

1. Instructors will generally advise the type of test and approximate number of questions on the exam, the major and minor topics to be covered, the date and time of the exam, and the frequency of exams for the course of study.
2. Instructions for examinations will be provided by the instructor. If you have a question after exam begins, please go to the instructor in the classroom and quietly make your inquiries. If the instructor notes changes on the exam that were not previously announced, these may be announced or written on the board.
3. The majority of examinations in the program are multiple choice type questions with separate answer sheets provided. Instructors may select other types of questions which may consist of matching, written response, fill in the blank, true-false, and critical thinking questions.
4. Test-taking skills can be improved. Review the exam before starting. Practice improving test anxiety when needed. Answer the questions first that you know. Never leave an answer blank. Review the exam and answer sheet before submitting to the instructor. The CARE center (P-600) in Carl Patrick Hall is also available on campus for review and enhancement of test-taking skills.
5. The majority of all radiology program examinations are NOT returned to the student. A student can ask to see a test during regular office hours of the instructor. There are usually no make-up tests/exams. If you miss a weekly test, your score on the final exam will be used as the score for that particular test. Students should make every effort to be in class on test days.

6. If you have a question about the exam, please see the instructor. If the instructor is unavailable for the day, consult the Program Director.
7. Examinations may not be reviewed in class. This activity is at the discretion of the instructor and when time is available.
8. Grading and scoring of the exam: The grading scale is in the academic section of the Student Handbook. An analysis of each exam is usually performed by the instructor. This provides information to the faculty as to the number scoring satisfactorily and unsatisfactorily on each question and the overall exam. The instructor has the responsibility to eliminate questions missed by a majority (80%) of the class. Example: 80% of 15 students = 12 students who missed the question..
9. Exams may be reviewed by the student upon scheduling an appointment with the instructor. The review of the test could reveal possible error in grading and the revealing of error made by the student to include the answer for questions missed.

CONSULT THE POLICY AND PROCEDURES MANUAL –STUDENT HANDBOOK FOR POLICIES NOT STATED HERE REGARDING ACADEMICS OR CLASSROOM.

ATTAINING PROGRAM COMPETENCY

STATEMENT:

Columbus Technical College School of Radiologic Technology is a competency-based program which requires the student to satisfactorily complete 4 Semesters of academic and clinical assignments and to demonstrate proficiency in performing various radiographic exams and related duties once accepted. Students must complete the program within a minimum of 18 months , once accepted, and within the stated attendance guidelines.

A student will not be considered for completion of the program and receipt of his/her degree until **all** requirements in academic, clinical, and attendance areas are met.

The following outlines the required competencies:

1. Academics

The student must achieve the following competencies:

- A. A minimum grade of C in each course with Final Exams being cumulative in each course.
- B. A minimum average of C per semester for 4 semesters.
- C. A required practice simulated registry examination may be given as early as the end of the 4th or 5th semester.
- D. A minimum grade of **75** on at least **TWO** Simulated Registry Exams **or** a minimum grade of 75 on one exam and on EACH test subject category on administered Simulated Registry Exams. This competency is also a requirement for graduation. (See Graduation/Professional Information Section)

2. Clinical

The student is enabled to achieve competency through the following:

- A. Classroom instruction and Simulated Labs
- B. Faculty observation and evaluation
- C. Staff Radiographers' evaluations of clinical performance via weekly and progress evaluations.
- D. Staff Radiographers' evaluations on all clinical proficiency exams per student per semester.
- E. Faculty audit of proficiencies by students' actual performance or simulation of exams to include image evaluation.
- F. Faculty audit of competency by actual students' performance of simulation of room set-up.
- G. Faculty conducts small group image evaluation.
- H. Faculty and/or staff conducts clinical demonstrations.
- I. A grade minimum grade of B or better in all clinical courses.

3. Attendance

Students must be present in both the clinical and academic environments in order to meet the required competency levels. The student must adhere to the attendance policies of the program as explained in the Student Handbook. The student shall not graduate with the class if he/she does not complete the program within the 4 semester/18 months and planned specified time. Any absences and/or discipline days must be completed/made up before the degree is awarded.

PROBLEM SOLVING PROCEDURES

In the event that a student has a problem concerning the Program, he/she has the right to present it according to the appropriate procedure as outlined in the Student Handbook Section 6, which defines the Problem Solving Procedure. Due process and the student appeal process is also in the Columbus Technical College Student Handbook.

If a matter needs the immediate attention of the Program Director or Clinical Coordinator, the student should request to see them immediately.

Section 3

Clinical Education

CLINICAL EDUCATION

Purpose:

The purpose of this outlined program of clinical education is to provide guidelines for students and those technologists involved with the development of clinical competence. These policies are to assure and promote patient and student safety and proper education practices.

Supervision:

Students must have adequate and proper supervision during all clinical assignments. In the radiologic technology program, students must be under **direct supervision**, until competency is achieved. Student supervision is overseen by a qualified practitioner who reviews the procedure in relation to the student's achievement, evaluates the condition of the patient in relation to the student's knowledge, and is present during the procedure and reviews and approves the procedure. **A qualified radiographer must always be present during student performance of a repeat of any unsatisfactory image.**

Once the student is deemed competent in procedures being challenged, he/she will be under **indirect supervision**, which is defined as supervision provided by a qualified practitioner, immediately available to assist student as needed. Immediately available is interpreted as having a qualified practitioner physically present adjacent to the room or location where the radiographic procedure is being performed.

Repeat radiographs by any student must be performed under direct supervision, regardless of competency level.

ASSIGNMENT OF CLINICAL HOURS:

The Program Director will schedule student clinical assignments in cooperation with the Clinical Coordinator and affiliate clinical site managers/instructors. This is to maintain orderly flow in the departments and adequate rotation of clinical experience for the students. Students will be assigned to different rooms in each department on a rotational basis. They will be under the supervision of the registered technologist working in that radiographic room. Students who have jobs must work their hours at those jobs around the planned clinical schedule of the Program so as not to interfere with assignments. Clinical schedules are posted in advance of the next semester, so students have time to make necessary arrangements for job duties, childcare, and the like. **Students should schedule all dental, doctor, and other appointments on their off time, when at all possible.**

RADIOGRAPHIC CLINICAL EDUCATION GRADING:

The **AFFECTIVE PERFORMANCE EVALUATION** is an assessment of the affective domain. Clinical evaluations are completed weekly by the assigned radiographer and/or the clinical instructor. The **Director's Report** is completed by the Clinical Coordinator/Program Director. The clinical weekly evaluation contains blocks of descriptive terms of performance areas. The Director's Report includes blocks of descriptive areas of performance. The **PSYCHOMOTOR PERFORMANCE EVALUATION** on the back of the clinical evaluation contains psychomotor evaluation aspects of grading the student in their clinical assignment. These three reports are issued to the student for review and signature. The student should sign each set of evaluations when given regardless of whether the student agrees with the evaluation. The signature denotes that the student has been made aware of the evaluation. Should a meeting with the evaluating radiographer and the student be necessary, the Program Director or Clinical Coordinator will facilitate that meeting to bring the issues noted to the table for discussion. The evaluation can be retracted and a new evaluation submitted with changes, if necessary.

Students are also evaluated on their employability by starting out each semester with 100 banked points. Each absence, tardy, or other infraction leads to points being deducted from the 100 total points (see Section 3 under Employability). At the end of the semester, this section is documented as a portion of the total grade.

Each semester, the students will participate in writing assignments meant to develop their critical thinking skills. The first clinical semester, the students will participate in a journaling assignment, and the following semesters, will be assigned clinical case studies to give their input as to the appropriate resolution of the case study presented.

The weights of each of these areas of grading are as follows:

- Clinical Weekly Evaluations = 15%
- Director's Report = 15%
- Employability = 15%
- Clinical Journaling/Clinical Case Studies= 15%

The **APPLIED CLINICAL PROFICIENCY** performance is an assessment of the cognitive and psychomotor skills. The number, requirements, and forms for each semester are described and listed in the Clinical Education Master Plan. A Clinical Progress Evaluation (Psychomotor) appears on the back of the Clinical Weekly Evaluation completed by the assigned radiographer. The progress evaluation is based on written published objectives for each type of radiographic assignment.

The Proficiency evaluation is a separate form completed by the registered radiographer. Students who fail to complete the required number of proficiencies during a given semester by the due date assigned shall receive a grade based on the number of proficiencies completed. The remaining proficiencies must be completed by the end of the next semester to prevent further grade reduction.

The weight of these two components is:

- Progress Evaluations = 10%
- Clinical Proficiencies = 30%

Students must maintain an average of 80 or above in clinical to remain enrolled in the Program.

PROBLEM SOLVING PROCEDURE:

In the event a student has a problem concerning the Program, he/she has the right to present it accordance with the appropriate procedure as outlined in the Student Handbook, Section 6.

If a student wishes to respond to the evaluation, it should be discussed with the Program Director or Clinical Coordinator. If a matter needs the immediate attention of the Program Director or Clinical Coordinator, the student should request to see them immediately.

PROPERTY OF CLINICAL RECORDS:

All clinical record forms, including Clinical Evaluation forms, are the property of Columbus Technical College and are not to be removed from the premises. Section 6 of the Student Handbook defines the disciplinary action for failure to follow policies in this regard.

EMPLOYABILITY

At the beginning of every clinical semester, each student will have 100 points banked in the “Employability Category”. The designated point values listed will be deducted for **“EACH”** violation during the semester. At the end of the semester, the remaining points will count as 15% of the Affective Performance Evaluation portion of the course grade.

Points Deducted	Clinical Violations
5	Failure to use time card to clock in/out. *This will be counted as a Tardy.
5	Double-punching where time cannot be distinguished. *This will be counted as tardy.
5-10	Failure to comply with dress code
10	Unreported Absence from clinical site- (must be reported to clinical coordinator and clinical site)
10	Failure to wear proper uniform to and from the clinical site (cleaned and ironed shirts, pants/skirts, lab coats with patch, name tag, and dosimetry badge.
10	Leaving the clinical site before designated time regardless of reason without notifying the Clinical Instructor/Clinical Coordinator first
10	Failure to turn in clinical time card for the previous week on time. 10 Employability points will be taken off for each day late. Time cards are due on Monday following the last day of clinical for the previous week.
20	Failure to report any absence or tardiness at least 30 minutes prior to start of shift (must be reported to clinical coordinator and clinical site)
30	Washed Time Card/Lost Time Card.
30	Failure to report absence to clinical coordinator and clinical site
50	Failure to comply with the policies and procedures of the clinical affiliate sites (this includes smoking on clinical site property: e-cigarettes are included in this policy)
10-50	Failure to demonstrate a professional or ethical attitude (will be determined on a case by case basis by Program Director or Clinical Coordinator)



Radiologic Technology Program
Student Clinical Affective (Behavioral) Performance Evaluation

STUDENT: _____ **WEEK OF:** _____ **ASSIGNMENT:** _____

0-1= Unsatisfactory--- Performance is below expectations; Action plan & follow-up are required to address performance deficiencies.

2= Needs Improvement-Performance meets some, but not all, performance expectations. Performance must be more consistent to successfully meet MINIMUM. Action plan required.

3= Satisfactory/Successful -Performance meets the minimum acceptable expectations.

4= Outstanding-Consistently maintains & exceeds performance expectations. Results MEET or exceed expectations and represents top performance as compared to student peers performance.

AFFECTIVE PERFORMANCE CRITERIA	RATING	SUGGESTIONS/COMMENTS
1. <u>PATIENT CARE</u> -communicating with, assistance skills; comfort & care.		
2. COMMUNICATION ;- With staff & Physicians; cooperates; listens & carries out request		
3. PERFORMANCE- QUANTITY & QUALITY DURING ASSIGNMENT ; Initiative and Motivation		
4. OBSERVANCE & ATTENTIVENESS during procedures; actively participating		
5. PROFESSIONAL COMPOSURE , adaptability; self-control; Professional ethics		
6. ATTITUDE : toward clinical tasks, interest; Constructive criticism & instructions.		
7. UTILIZATION SKILLS ; equipment & supplies; inc. manipulation & management		
8. Accuracy & completion of paperwork; stocking supplies; film processing		
9. Organizational ABILITY - performance of task, orderly flow; use of time		
10. TEAM WORK/MEMBER PERFORMANCE ;		
11. RADIATION PROTECTION SKILLS Self; patient & personnel		
12. PUNCTUALITY to assignment (all day: inc A.M. and Mealtime return)		
13. APPEARANCE - conforms to dress code; hair, nails, earrings, clean uniform & shoes.		

RADIOGRAPHER _____

DATE _____



RADIOLOGIC TECHNOLOGY PROGRAM
Applied Clinical Proficiency Performance

STUDENT _____ **SEMESTER** _____

Date Performed- _____ **Hospital** _____ **Room** _____

PATIENT INFORMATION(MR#) _____

Exam Performed _____

PROJECTIONS/VIEWS _____

Rating: 0 = Unsatisfactory 1= Acceptable/needs Improvement 2 = Satisfactory/acceptable

PERFORMANCE CRITERIA:	RATING	COMMENTS:
1. Interpretation of Request		
2. Facilities readiness/room/equipment, supplies		
3. Equipment Use/manipulation		
4. Patient Care, Safety		
5. Proper selection- cassette & accessories		
6. Correct Positioning - anatomy/rotation/angle		
7. Correct Centering- cassette/IR, part, tube.		
8. Correct Technical Factors		
9. Radiation Protection - collimation, shielding.		
10. Correct Markers & cassette I.D.		
IMAGE EVALUATION CRITERIA:		
1. Correct centering & tube, part, IR alignment		
2. Proper Density, Contrast, and Recorded Detail.		
3. Correct position/part rotation		
4. Correct Patient/cassette, ID & markers		
5. Radiation protection/collimation & shielding		
6. Performance in: Communication, problem-solving, and critical thinking.		
TOTAL POINTS OF PERFORMANCE EVALUATION		Prof. Grade _____

The exam was performed by the student with appropriate supervision and no repeated films. I observed the performance and reviewed the Images with the student.

R.T. SIGNATURE _____

DATE: _____



Radiologic Technology Program
Director's Report of Student Clinical Affective Performance

STUDENT _____ **WEEK** _____ **ASSIGNMENT** _____

<u>Professional Attitude:</u> Rude, Unethical, Unprofessional Immature, Unacceptable	-Acceptable BUT needs immediate improvement -Needs refinement of professional behavior	-Mature and Professional -Reflects standards and behavioral traits instructed
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COMMENTS:

<u>Self-Image:</u> -Negative behavioral traits -Lacks confidence or is overly confident -Exhibits inability to take on responsibility and/or make decisions	-Needs improvement -Exhibits some lack of self confidence -Self conscious	-Confident, shows pride through behavior & actions reflect good self-image -Pleasant disposition exhibited
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COMMENTS:

<u>Punctuality/Attendance:</u> -Tardy (2 or more X's per week) -Multiple absences -Over due time card -LOST TIME CARD -*FAILURE TO REPORT ABSENCE PROPERLY -*LEAVING EARLY WITHOUT PROPER PERMISSION *Constitutes disciplinary action	-Failure to clock in/out properly -Damaged time card(1st time) -Past due submitting time card (1st time/semester) -Tardy/Absent 1 time this week	Excellent: -no absence -no tardy -Reports to assigned area on time -clocking properly -time card on time
---	---	---

COMMENTS:

<u>Appearance/Dress Code:</u> -Unacceptable DOES NOT meet dress code; - DAMAGED or LOST Film Badge	-Appearance REQUIRES IMMEDIATE improvement; -Area(s) of dress code NOT MET; -Film Badge not worn properly.	Excellent: neat, clean, professional, meets ALL of the dress code; Film Badge is worn properly.
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COMMENTS:

Clinical Coordinator's/Director's Signature

Signature _____ Date _____

Student

Signature _____ Date _____

STUDENT POLICIES FOR CLINICAL ASSIGNMENTS

A. PATIENT CARE AND EXAMINATIONS:

1. Patients are your first concern. Be kind, tactful, gentle, courteous, and professional. Follow instructed customer service standards.
2. Do not take patients back to the radiographic room without the requisition and appropriate records, if used, and without the consent of the RT. Students are required by HIPAA standards to identify the patient by two different means. These include verbally asking the patient to give his/her name, his/her birth date, his/her ordering doctor, or what procedure he/she is having. It is important to check the patient's ID band if the patient is an inpatient for proper identification.
3. Students are required to write their initials on the requisition form at the beginning of the examination along with the RT number or initials, etc.
4. Upon completion of an examination, an RT **MUST** check all images before they are sent for interpretation by the Radiologist.
5. Students, at no time, will decide if a patient needs additional radiographs or examinations other than specified by the Radiologist or attending physician. Students are not to call physicians' offices unless requested to do so by the supervising RT.
6. Students are not to render interpretations of radiographs or reveal radiographic images or findings to the patient or other persons.
7. All repeated radiographs must be performed with the RT present and with their direct supervision.

B. EQUIPMENT:

1. Radiographic equipment is extremely expensive. Handle ALL equipment with care.
2. Students will NOT call the service engineer for equipment repair. This is the obligation of the radiographer or supervisor of the department.

C. CLINICAL ASSIGNMENTS:

1. Students are to remain in their assigned area unless otherwise instructed by the Program Director, Clinical Coordinator, or clinical department supervisor/instructor.
2. Students are under the direct supervision of the RT until that student achieves competency. This means that the RT must be physically present during procedures. When the student achieves competency, he/she is under indirect supervision, and the RT must be immediately available to the student.
3. Students are not to be in other areas of the hospital "observing or wandering around looking". This includes the Emergency Department or any other areas when not assigned.
4. Students will not be loitering around the front desk, processing area, or hallways.
5. Students are to be active team members and assist in keeping assigned clinical areas stocked with supplies and clean linen and to assist in keeping the assigned room or area clean and neat, including room equipment or portables/c-arms and restrooms. It is important to discuss responsibilities for assigned areas with assigned RT on the first day of a new assignment.
6. Students **MUST NOT** leave the hospital without the permission of the Program Director/Clinical Coordinator (or Clinical Instructor in their absence). An RT, supervisor, or others **DO NOT** have the authority to permit any student to leave the hospital. This includes ALL clinical assignments.
7. Students are to follow the directions of the assigned RT as related to the assigned clinical tasks and patient care activities.
8. Chewing gum is **NOT** permitted during patient care activities. It is very unprofessional, rude, and distracting.
9. The use of profanity will **NOT** be tolerated by anyone.
10. When an RT answers a question for you, instructs you, or checks/evaluates radiographic images, you are not to ask another RT their opinion. Such conduct is unprofessional.

11. The student is not to take offense when instructed, corrected, or given constructive criticism. This is a time for learning and honing your skills and any student should listen intently to correction or instruction to attempt to perform procedures at an optimum level.
12. Students will be introduced to various modalities in addition to routine radiography while in the program. These special rotations will be designated in certain semesters in the areas of MRI, Nuclear Medicine, Radiation Therapy, Special Procedures, Ultrasound, and Cardiac Cath Lab. To assure that all students have equitable opportunities to observe, it is recommended that any female student interested observing in Mammography should make arrangements with a Breast Imaging Center to do an observation during a semester break while not in school. The college also has a Mammography course that is one semester, post-graduation, which is held on even year rotations with CT on odd years, or as needed. Students interested in Mammography should register for this post-graduate course where they will be able to learn more about this modality and will be able to be assigned to clinicals in the Breast Imaging Department.

POLICIES REGARDING THE USE OF HOSPITAL TELEPHONES

Students are **NOT** to use Radiology Department telephones except in cases of EMERGENCY. Students shall **NOT** receive telephone calls except in cases of EMERGENCY. Family members may telephone the school office and provide a message which will be relayed to the student. School faculty and staff members are not responsible for the lack of information with the message. All outgoing telephone calls shall be made from the student's own cell phone and should be made during breaks or at lunch time, or, at the end of the shift, if not an emergency. No long distance telephone calls will be placed by students and billed to the hospital. **Cell phones are not permitted in the clinical area. They should be left in the student's assigned locker or in their vehicle.**

POLICIES REGARDING VISITORS

A visitor is defined as ANYONE (including family members and friends) coming in and desiring to see you for any period of time for any reason. Students are **NOT** allowed to have visitors during clinical or academic class hours. No children are allowed at the college or clinical sites.

POLICIES REGARDING ACCIDENTS

If a student is involved in an accident or witnesses an accident or injury involving a student, employee, patient, or visitor while within the hospital or on hospital property, he/she should report it immediately to the supervisor in that area and notify the Program Director. If the person is injured, no attempt should be made to move him/her until approved by a physician or supervisor.

A written occurrence report of the incident must be completed and given to the department supervisor/department manager. This report is documentation of the incident and is kept on file in the hospital for legal purposes. The hospitals are not responsible for the medical care of injured persons not handled in accordance with the above procedures.

For accidents involving students, each Clinical Facility will provide the initial first aid or medical treatment on site of the accident or injury. All ongoing treatment or follow-up is the total responsibility of the student. Students injured while on clinical duty time and referred to outside physicians, specialist, etc. are responsible for payment of fees as billed by such parties.

All students enrolled at Columbus Technical College have school-time-only accident insurance. Please see Columbus Technical College student handbook or Student Services under policies and procedures. Forms should be picked up in the Human Resources Department in the Hartline Building as soon as possible for completion. Students are covered under the liability insurance of the college during all clinical time assigned, per the Human Resources Department.

Injuries and/or illnesses incurred outside of clinical time and those injuries not related to clinical time are the responsibility of the student. Hospital physicians should not be asked to treat students for such problems. Students should see their private physicians on their own time. Time off due to accident or injuries occurring during clinical assignment time is not an excused absence. Any absences must be made up during vacation time between semesters.

Should a student be injured by a contaminated needle, the same process as above should be followed. In addition, the student should contact the Program Director as required by the CTC Exposure Control Policy. Appropriate personal protective equipment (PPE) should be worn when radiographing patients or when it is reasonable anticipated that there may be hand contact with blood or other potential infectious materials or touching contaminated items or surfaces. Students should wash hands immediately or as soon as feasible after removing gloves or other PPE. Remove PPE after it becomes contaminated and before leaving the work area, disposing the PPE in a designated red biohazard bag. Face and eye protection should be worn when splashes, sprays, spatters, or droplets of blood or other potential infectious materials pose a hazard to the eye, nose, or mouth. These should be removed immediately, or as soon as feasible, any garment contaminated by blood or other potential infectious materials, in such a way as to avoid contact with the outer surface.

Columbus Technical College Control Plan link:

<F:\My Documents\CTC Forms\ECP Columbus Technical College 2016-2017.pdf>

POLICIES REGARDING SAFETY

Safety rules shall be followed for the sake of patients and employees. The student's cooperation is expected in demonstration and observation of all safety precautions which will result in a better environment at each of the clinical sites.

The following are some safety rules:

- Report or correct any unsafe condition that you observe.
- If there is any foreign material on the floor, pick it up or see that it is removed.
- Always walk and keep to the right of the hallway. Be particularly cautious at hallway intersections.
- The hospital is not a place for horseplay or practical jokes. Serious injury could result.
- Defective or broken equipment should be reported at once.
- Report all safety violations or injuries to the Department Manager or Supervisor/Clinical Instructor as soon as possible.
- Keep informed on fire safety and weather disaster plans. Know the position of alarm boxes, extinguishers, civil defense shelters, and methods of evacuating patients.
- Avoid wet hands when handling electrical equipment.
- Remember safety rules and body mechanics when using wheelchairs, stretchers, beds, and other equipment used by patients.

- Allow others to exit the elevator before you attempt to enter. This is common courtesy, especially if you are pushing radiographic equipment.

RADIATION SAFETY

I. STATEMENT:

Radiation exposure should always be kept to the lowest possible level (ALARA). Various methods of radiation protection can be applied to insure safety for persons employed in fields involving radiation. Students, as well as the Radiologic Technologists, are responsible for using accepted methods in order to protect themselves and others. One concept all personnel should be aware of and utilize is the “ALARA CONCEPT”, which says that radiation exposure should be kept “as low as reasonably achievable”.

II. EXPOSURE RECOMMENDATIONS:

The National Council on Radiation Protection (NCRP #116) recommends an annual effective dose equivalent limit of 5 REM. The following table may be referred to when questions about exposure levels arise:

Occupational exposures

- | | |
|---|------------------------------------|
| 1. Effective dose limits | |
| a) Annual | 50 mSv (5 rem) |
| b) Cumulative | 10mSv x age (1 rem x age in years) |
| 2. Equivalent dose annual limits for tissues and organs | |
| a) Lens of eye | 150 mSv (15 rem) |
| b) Skin, hands and feet | 500 mSv (50 rem) |

Public exposures (annual)

- | | |
|--|-----------------|
| 1. Effective dose limit, continuous or frequent exposure | 1 mSv (0.1 rem) |
| 2. Effective dose limit, infrequent Exposure | 5 mSv (0.5 rem) |
| 3. Equivalent dose limits for tissues And organs | |
| a) Lens of eye | 15 mSv |
| b) Skin, hand and feet | 50 mSv |
| 4. Remedial action for natural sources: | |
| a) Effective dose (excluding radon) | >5 mSv |

Education and training exposures (annual)

- | | |
|---|-----------------|
| 1. Effective dose limit | 1 mSv (0.1 rem) |
| 2. Equivalent dose limit for tissues And organs | |
| a) Lens of eye | 15 mSv |
| b) Skin, hands and feet | 50 mSv |

Embryo-fetus exposures (monthly)

- | | |
|--------------------------|-------------------|
| 1. Equivalent dose limit | 0.5 mSv (0.5 rem) |
|--------------------------|-------------------|

Negligible individual dose (annual)	0.01 mSv (.001 rem)
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Source: NCRP #116

In order to insure proper monitoring from radiation, all students are provided Radiation Monitoring badges. These are issued through Columbus Technical College. The badge insert should be changed out once a month as directed by the Clinical Coordinator/Program Director. The Clinical Coordinator obtains the new insert and exchanges them with the students for old ones. The old badge inserts are sent in for reading. Badge reports are received, read, and kept on file.

The following shall be followed:

1. No student is to be permitted into the radiology department for clinical assignment without a radiation badge.
2. Radiation monitoring badges shall be worn by each student on the designated area of their person each day of clinical assignment. Badges are to be worn on the uniform collar. When wearing a lead apron, badges should be worn outside the apron on the uniform collar. Pregnant females are double-badged, with the second badge worn at the waist and under the apron.
3. Students employed in Radiology outside of school time **MUST** wear a badge from that facility. The student badge **must only be worn** at student clinical assignment times.
4. It is the student's responsibility to turn in the badge monthly for interpretation.
5. It is the student's responsibility to take care of the badge during the period of time worn. If any of the following should occur, you **MUST** report it immediately to the Clinical Coordinator:
 - A. If you lose or misplace your badge
 - B. If any incident or accident affects a badge, it is the student's responsibility to report the incident immediately. When a student badge is lost, the Program Director or Clinical Coordinator will make documentation of the incident and assign a spare badge to the student, contacting Landauer, Inc. to be sure the spare badge number is associated with that student for that particular month.
6. Student badge reading reports will be reviewed by the program monthly and students will initial the report denoting that they have seen the report within 30 days following receipt of data. Badge reports are placed in the files maintained by the Columbus Technical College Radiography Program. If a reading of **60 mrem or higher** is received within a month, the student will be counseled by the Program Director/Clinical Coordinator to determine where the student was scheduled and what may have attributed to the higher reading. The Radiation Safety Officer for the Program is Ms. Kimberly Whitaker, Clinical Coordinator, who will discuss these issues with the student and the Program Director to determine a resolution. The program will also contact Landauer, if necessary, to have the badge re-read for accuracy of data. An excess of the Federal Standards may result in a leave of absence from the clinical portion of the program until a designated time is determined by the appropriate officials.

Reviewed and Revised 11/20/2017

III. POLICIES AND PROCEDURES TO CONTROL STUDENT RADIATION EXPOSURE

1. Students **must not** hold image receptors or patients during exposures **at any time**. Use of proper imaging equipment or tape to hold image receptors is recommended. Use of acceptable immobilization techniques to prevent or minimize the need to hold patients should be employed. Other healthcare workers or patient family members should assist in holding the patient or image receptor during the exam.
2. Protective aprons must be worn by each person in the fluoroscopic room, excluding the patient, who should be shielded as appropriate, according to the procedure being performed. Students are **NOT** to stand near the x-ray tube or adjacent to the patient when performing fluoroscopic exams OR portable radiography. During fluoroscopy, students **MUST NOT** turn their backs to the table (this leaves one unprotected). Arms should be kept behind the back whenever possible.
3. A lead shielding device which covers the Bucky slot should be used during fluoroscopy. Any malfunctions of this device should be reported immediately.
4. Protective lead drapes must be left on the image intensifier during fluoroscopy.
5. When operating portable units, a lead apron **MUST** be worn. **DO NOT** stand in direct alignment with the primary beam. Stand at least six feet or more and at right angle from the patient and the tube, if you cannot leave the room during the exposure.
6. Under no circumstances will the student permit themselves or fellow students (or any other human being) to serve as patients for test procedures or experimentation where an exposure will be made.

Reviewed. 11/20/2017

IV. POLICIES AND PROCEDURES TO FOLLOW TO LIMIT EXPOSURE TO PERSONNEL, PATIENTS AND PUBLIC:

1. Doors to the radiographic rooms must be closed at all times during an examination. There is usually a relay device which prohibits the production of radiation if the door is ajar.
2. During fluoroscopic examinations, set the timer to begin the exam as instructed. **DO NOT** continually reset the timer unless instructed by the radiologist and/or staff technologist assigned to the room. When the timer is reset, record the time that was used and announce to the radiologist or physician how much fluoro time has accumulated.
3. 1.5mm aluminum filtration has been added to the 1mm inherent filtration of the tube housing and collimator to provide the total filtration required of 2.5mm Al. Added filtration should be checked frequently.
4. The field of radiation should be collimated to the smallest size possible but yet include the area being examined. At no time should the field of radiation exceed the size of film being used.
5. Any female patient of childbearing age **MUST** be questioned for the date of her last menstrual period before any exposure is made. If the possibility of pregnancy does exist, a radiologist must be consulted.
6. If a patient is pregnant and must have a radiographic exam, additional lead shielding is placed over the fetus, if at all possible. The exam should only be done if absolutely necessary.
7. Gonads should be shielded on any radiographic exam of the abdominal area unless shielding would interfere with the objectives of the exam.
8. The ovaries should be shielded on any radiographic exam of the abdominal area unless shielding would interfere with the objective of the exam.
9. Periodic cassette/IR checks should be made to check the alignment of the primary beam with the localization light of the collimator.

The above policies and procedures will be instructed in the classroom during the first semester of the program. The faculty will demonstrate the application of any equipment use during the first semester. The academic and clinical instruction will be performed prior to students being assigned in the clinical sites.

A separate policy regarding radiation exposure and protection of a pregnant student is also found in following pages of this handbook. (See pages 55-58)

NOTE: In order to be considered as a candidate to the Program, individuals must be 18 years of age by the beginning date of the Program. The purpose of this requirement is due to meeting the Federal Regulation of Radiation exposure to the individual considered as a minor.

Rev. 11/20/17

RADIATION EXPOSURE DURING PREGNANCY:

The National Council on Radiation Protection and Measurements (NCRP) recommends that the monthly effective dose equivalent (EDE) to the embryo-fetus from occupational exposure to the expectant mother should be limited to 0.05 REM. Through proper instruction of all safety precautions, it can be possible to limit all occupational exposure to under 0.5 REM for the entire gestation period and prevent fetal total equivalent dose limits from being surpassed.

Students enrolled in the Program are instructed in proper safety precautions and personnel monitoring prior to being admitted to any ionizing radiation areas. Students are required to abide by all safety precautions and to remember the importance of keeping exposure as low as reasonably achievable (ALARA) through a combination of Time, Distance, and Shielding. Students are strongly encouraged to consider how the status of pregnancy will place additional stress and requirements with the successful completions in the academic assignments and exams to be met within a number and variety of courses in the academic curriculum, and further, the importance of successfully maintaining a rotational clinical schedule throughout the various assignments without interruption.

PREGNANCY POLICY:

Should a student become pregnant:

1. it is the student's decision to voluntarily disclose her pregnancy to the Program Director. The Program follows the declared pregnant worker definition as "a female student who has voluntarily informed her designated program official, in writing, of her pregnancy and the estimated date of conception";
2. the pregnant student will receive additional radiation safety counseling;
3. the student is responsible for wearing provided radiation protective clothing and for good work habits;
4. all pregnant students are issued two radiation monitoring badges. One badge will be worn on the collar outside of the lead apron. The other badge is to be worn at the abdominal level under the apron;
5. the monthly badge reports will be reviewed by the Program Director of the Radiologic Technology Program and the Clinical Coordinator. Should any level be reached above the normal limits under the apron of 500mR or above during the 9 month period, the student will be counseled and necessary action will be taken, including removal from all areas of fluoroscopy as needed.
6. the student will sign Declaration/Un-declaration of Pregnancy form of understanding, releasing college and affiliates of any liability associated with fetal damage should she decide to remain in the program.

Once informed of the student's pregnancy, the program offers students several options to be considered due to the possible hazards of radiation exposure. The student should make her decision known by indicating the option of choice on the 2nd page of the Declaration/Un-declaration Form provided. In addition, the student should submit recommendations made by her physician regarding the pregnancy, if available. The options available to the student are as follows:

1. Withdrawal from the program, both academically and clinically. A slot will be held for the student in the next class so she can come back and complete the program;
2. Request a leave of absence from the program, returning after pregnancy terminates at appropriate semester.
3. Continue with academic courses and withdraw from clinical courses. Clinical courses must be completed after termination of pregnancy.
4. Continue with academic and clinical components with no modifications, until termination of pregnancy.

****Any student can undeclare her pregnancy at any time by filling out the Declaration/Undeclaration of Pregnancy Form, which follows this policy on Pages 57 and 58.**

The Pregnancy Policy is presented to each radiography student during orientation of the program. A copy of the Student Handbook is also available to prospective students. Each candidate is issued a copy of the Student Handbook (Policy and Procedure Manual) to take home and is permitted to review all policies. The Policy and Procedure Manual is reviewed the first official day/week with all students and policies are explained by the Program Director as Radiation Protection Exposure and Safety measure are presented.

THE ABOVE POLICY IS SUBJECT TO CHANGE DEPENDENT UPON FEDERAL OR STATE REGULATION CHANGES.


Reviewed 11/20/17

More information may be obtained at the following U.S.NRC website:

<http://www.nrc.gov/reading-rm/doc-collections/cfr/part020/part020-1208.html>

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's) 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's 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

**Columbus Technical College
School of Radiologic Technology
Declaration/Undeclaration of Pregnancy**

Student Name: _____ **Date:** _____

This is to voluntarily disclose and notify the Radiologic Technology Program Director, that I:

_____ **Declare I Am Pregnant** _____ **Un-declare My Pregnancy**

Estimated Date of Conception _____ Estimated Date of Delivery _____

In making this declaration, I understand that the unborn child should not receive in excess of 500 millirems of radiation during the term of pregnancy. And, further, that if records show that the unborn child has received 450 millirems of radiation or greater at the time of this declaration, the unborn child is permitted to receive only an additional dose of no more than 50 millirems of radiation during the term of pregnancy.

I acknowledge that I have been counseled regarding Radiation Protection and Safety and/or have read and understand the following:

1. Student Handbook – Section III – Pregnancy Policy and the instructions to the student should they become pregnant.
2. Student Handbook – Section III – Radiation Safety Policies.
3. Student Handbook – Section IV – Medical Leave of Absence Policy, and that re-entry into the Program must be approved by the college and the Program Director/Dean, Health Science and Nursing Division.
4. And, further, that the stated policies in the student handbook are covered by the exclusion statement that “policies are subject to be changed and that enrolled students will be notified”.

_____ **I understand that I may un-declare my pregnancy at any time.**

Explanation of radiation safety and protection has been conducted during the early part of the first semester of the Program and is instructed by the Program Director or other faculty. Additional counseling is provided and supported throughout the length of the Program. Additional attention is made to policies and procedures concerning pregnancy in the Student Handbook provided to me at the beginning of my orientation to the program.

I hereby certify that I have read the above and understand. Additionally, I do hereby release Columbus Technical College and the Radiologic Technology Program and any of the clinical affiliates from any and all liability for injury to either myself as the expectant mother, or the child due to radiation exposure during this pregnancy.

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

Counseled by
Program Director: _____ **Date:** _____

****Please make your statement of intent concerning your options offered on the back of this form.**

I understand that I have the following options to choose from in relationship to the Radiologic Technology Program during my pregnancy. I also understand, as noted above, that I can un-declare my pregnancy at any time.

I have decided to choose the option check-marked below.

- ☐ **1. Withdraw from program both academically and clinically. I may return to begin the program again with the next class, if space is available.**
- ☐ **2. Request a leave of absence from the program, returning after pregnancy terminates at appropriate semester.**
- ☐ **3. Continue with academic courses and withdraw from clinical courses. Clinical courses must be completed after termination of pregnancy.**
- ☐ **4. Continue with all academic and clinical components with no modifications, until termination of pregnancy.**

Student Signature

Date

Section 4

Attendance Policies & Procedures

ATTENDANCE POLICIES

ATTENDANCE DURING THE PROGRAM:

In order to fulfill the number of clinical hours required per semester, it is necessary for students to attend clinical in various shifts and times. This includes clinical hours on Friday when the college does not have didactic classes being held. This also includes afternoon clinical times which could extend to as long as 8pm. The program also has a weekend rotation, which is usually a Saturday, to give students the experience of the differences in department operation on weekends with a smaller technical and clerical staff. There is usually only one semester when a weekend day is assigned and the student will have a day off during the week to compensate for the Saturday rotation.

SCHEDULED SEMESTER BREAKS:

Semester breaks vary according to how many days are designated by the college. Any and all absences during the semester are to be made up during the finals week at the end of the semester before semester breaks. The Clinical Coordinator or Program Director will schedule makeup time at the end of each semester.

HOLIDAYS:

The school schedule will follow holidays designated by Columbus Technical College and can be found in the college student handbook and the semester calendar can be found on the college website noting important dates. Students cannot be scheduled to work at clinical sites during official holidays.

ACHIEVEMENT INCENTIVE TIME OFF (AIP):

AIP may be taken on a day when no academic classes are scheduled. Because weekend duty is assigned infrequently, time shall not be used for Saturday clinicals. Time shall not be used to “erase” absences.

To take earned time, the student must have earned time to take. To receive time, the following can be utilized:

- Attendance to a continuing education activity through the local radiography society (CSRT). For each hour of continuing education, one hour of comp time is given.
- An incentive day (AIP day) - for all A's in a semester, with no absences or tardies and no missed punches on time card, a full day is given.
- Some community service activities scheduled by the college (career fairs, boy scout jamboree, community walk volunteerism/participation, etc.) This time will be the exact time spent at the event and must be documented by the event coordinator/designee.

In order to take earned time off, the students must complete a Request form* and submit it to the Clinical Coordinator or Program Director **AT LEAST ONE WEEK PRIOR** to the day, date, and time requested as off. Requests received closer than 1 week shall be returned to the student without approval, unless it is an emergency situation. Time taken is done in full and half days only, not hourly.

EXCHANGING OF DUTY TIME:

Class and clinical schedules are posted several weeks in advance. Students are requested to make plans and appointments around these schedules. The exchanging of duty time is NOT permitted without consulting with the Clinical Coordinator/ Program Director. In order to exchange an assignment, a Request form* must be completed and submitted to the Clinical Coordinator/Program Director at least one week prior to the day, date, and time requested. Any exchange that is made between students should be made at the same clinical site, if possible, to avoid complications. It is the exchanging student's responsibility to keep up with the swapped time and to work for each other as designated. Abuse of this privilege will result in revoking of the offending student's exchanging privileges.

* Sample Request forms are listed below and on the Blackboard learning platform in each clinical course.

**SCHOOL OF RADIOLOGIC TECHNOLOGY
REQUEST FOR AIP-EARNED TIME OFF**

Today's Date: _____

I, **(Please Print)** _____ wish to request the following:
(check appropriate)

Comp Time: ½ Day (4.5 hours) _____ Whole Day (7 hours) _____

Date to be observed off: _____

Clinical Assignment: _____

By submitting this form, I understand the applicable policies involved.

Student signature: _____ Approved _____

Clinical Coordinator: _____ Disapproved _____

or

Program Director: _____

SUBMIT COMPLETED FORM TO CLINICAL COORDINATOR

**SCHOOL OF RADIOLOGIC TECHNOLOGY
REQUEST FOR EXCHANGE OF TIME**

Requesting Student _____ Today's Date _____

I, _____ will work for _____
(Requesting Student) (Exchanging Student)

On (day, date, & assignment) _____

Exchanging student, _____ will work for me

On (day, date, & assignment) _____

Reason for the exchange request: _____

With the above named students submitting this request, it is with the understanding of the applicable policies in the Student Handbook. And further, students exchanging understand that if a student fails to be able to report for duty (for any reason), that student will not be allowed to exchange time in the future.

Approved: _____ Clinical Coordinator: _____

or

Disapproved: _____ Program Director: _____

SUBMIT COMPLETED FORM TO CLINICAL COORDINATOR

ABSENCES:

If a student is absent more than 3 times during the semester, he/she will be required to meet with the Program Director to discuss disciplinary action, with the possibility of being dismissed from the program. Any absence, except for bereavement as outlined below, results in forfeiture (giving up) of vacation (semester break) time on a 1:1 ratio. One day of absence equals one less vacation day. Students will be scheduled for clinical duty during finals week, the last week of the semester prior to semester break. On the third absence during the semester, the student will receive notification from the Clinical Coordinator that he/she has met the limit of absences for the semester. Should the student be absent a 4th day, he/she will then be counseled by the Program Director and/or the Dean of Health Sciences and Nursing to determine if the student will be allowed to stay in the program and be placed on probation or dismissed from the program.

Absences may constitute disciplinary action review by the Program Director and faculty to include requiring a letter on official letterhead from the student's physician. These absences will be understood as needed due to health reasons but not excused from being required to be made up. Students with excessive absences may forfeit the opportunity to graduate with their class, if absences exceed the available days.

NOTE: Students when reporting for clinical and/or academic assignment are required to be able to function physically, mentally, and emotionally. When a condition prevents the individual from participating and performing fully, he/she will be required to leave. **Attendance is not simply to "put in time" but to fulfill the required activities for achievement of competency.**

REPORTING AN ABSENCE DUE TO ILLNESS:

If a student will be absent, he/she **MUST** follow this procedure:

1. At least 30 minutes prior to the assigned time, contact the Clinical Instructor/Department Supervisor of the Radiology Department/Clinic to which he/she is assigned **AND**
2. Contact the Clinical Coordinator **or** Program Director at least 30 minutes prior to assigned time by leaving a message of your absence on their voicemail

ILLNESS OCCURRING DURING CLINICAL ASSIGNMENT:

If a student becomes ill during clinical assignment hours, the following procedure is to be followed:

1. Report illness to the clinical site instructor and to either the Clinical Coordinator or Program Director **and**
2. If necessary, leave for home **OR** see your personal physician (at your expense).

WEEKEND DUTY:

Students are assigned a Saturday duty on a rotational basis. If you are ill during this time, follow the procedure previously described. Students **SHALL NOT** request to leave early from the assignment unless the Program Director has been consulted prior to the time of duty. The student will be given a off day on another day during the week when a Saturday is assigned.

MAKE UP TIME:

Make up time is performed only as scheduled at the end of the semester. All make up days must be recorded on the Time and Attendance card and are required to be a full shift for a 7 hour day or 4.5 hours if required for half day. All make up days are scheduled on weekdays only.

JURY DUTY OR COURT APPEARANCE:

A copy of the summons and/or letter from court is required to verify the jury duty or court appearance. The Program Director should be notified as soon as possible when a summons to serve is received. It may be possible to ask the court to delay the student's service until after completion of the program.

MILITARY RESERVES:

Military reserve and summer camp obligations are honored with proof of documentation from the military source. No makeup time will be required.

INCLEMENT WEATHER: In the event of inclement weather, students are urged to make an attempt to report to their assignment, unless advised otherwise by the college or Program Director. If travel is unsafe or weather conditions are hazardous, the Program Director will decide what measures are to be taken and students will be informed via college notification or by email as to the appropriate action, according to the Columbus Technical College policy in the college handbook. The college "ringback" will also notify students of times of hazardous weather/school closings. Listen for TV reports of school closings, as well. If a student decides that conditions warrant staying out, they must report their absence as described. The absence(s) will be treated according to the "Illness/Absence Policy". Students are reminded that all educational/clinical time **MUST** be completed in order to be eligible for graduation and taking the ARRT examination.

TARDINESS:

Students are urged to report for clinical duty at least 10 minutes prior to the scheduled time. This allows time to get from the parking lot assigned to the clinical site and to put away personal belongings such as purses, books, cell phones, etc., and time to get to their clinical area. Students will be considered tardy when they are not in their assigned area by 7 minutes past the scheduled time (7:37am, 8:37am, 11:37am, etc), which is dependent on the scheduled assignment. Arriving any time past 7 minutes over the scheduled time is and will be considered tardiness. Arriving into the assigned parking lot at the scheduled time is not considered being "ON TIME". Tardiness will be noted on the weekly Director's Report and the grade assigned will reflect the occurrence. Tardiness will reflect adversely on the student's Employability grade, given at the end of each semester. Students are thereby "warned" with each documented tardy. Students who are tardy 3 times in a semester are formally warned on their Director's Report. Upon the 3rd tardy, a whole makeup day will be added. Upon the 6th tardy, the student will receive further disciplinary action with possible dismissal from the program. Tardiness is interpreted as arriving 7 minutes late of the assigned/scheduled time. Arrival after 30 minutes will be counted as an absence and 20 points deducted from the student's employability grade. 30 points will be deducted if there is no call of the absence to the clinical site and to the clinical coordinator or program director.

BEREAVEMENT (ABSENCE DUE TO DEATH IN FAMILY):

3 Days are granted for a death in the immediate family (father, mother, legal guardian, husband, wife, child, brother, sister, grandparent). **NO** time is granted for family members not listed here. If the student chooses to attend the funeral of a family member other than those listed above, he/she should use earned time, if available, or will have to make up the time at the end of the semester. If more than the granted time is needed off for out of town travel, the student can consult with the Clinical Coordinator/Program Director. Additional time may be taken if the student has available Earned Time. The Program reserves the right to require a death notice indicating next of kin.

ABSENCE FOR OUTSIDE APPOINTMENTS:

Clinical and class schedules are posted several weeks in advance. Students shall schedule all dental, doctor, and other appointments after school, on off-duty time. If not, time off requested for these appointments will need to be taken from earned time. If earned time is available, a request will need to be filled out for a minimum of a half day. If no earned time is available, an absence of a half day will be counted.

MEDICAL LEAVE OF ABSENCE:

A full 18 months of education and training is required prior to formal completion of the Program, once accepted, and taking the ARRT exam. Arrangements may be made for return to the Program should an illness require an extended time of absence. The student should consult the Program Director and request a medical leave of absence. If an illness or accident results in more than **3 consecutive school days of absences**, a student will be placed on medical leave of absence and his/her return shall be at a future time when the remaining program requirements may be completed in the proper chronological order. The student will be required to provide a physician's release to return to school.

TIME AND ATTENDANCE CLOCKING PROCEDURES

Time cards will be issued to each student at the beginning of each semester. It will be the responsibility of each student to keep track of his/her time card and use the appropriate card each week for punching in and out at the clinical site.

Time clocks are located in each Radiology Department/Clinic for the specific use of the Radiology Student. Students must clock IN and OUT on the issued card only. No other time card is approved. If you forget your timecard, clock in on a piece of paper, have it initialed by the clinical instructor or radiographer assigned, and staple it to the time card or call the Clinical Coordinator to report your time IN and OUT, if you do not have your time card. A Tardy will be assessed for any missed punches noted.

Time cards are to be turned in no later than Monday afternoon of the following week to the Clinical Coordinator. Failure to do so will result in 10 points off employability for each day the time card is late being turned in.

DO NOT write on the time card unless told to do so. **NEVER** clock in for another student. If there are questions or problems regarding time IN or OUT, these must be discussed promptly and approved by the Clinical Coordinator or Program Director. If a student notices that the time on the time clock is not correct, the Clinical Coordinator or Program Director should be notified as soon as possible to it can be corrected.

Students are subject to disciplinary action, including dismissal if:

1. found to be clocking IN or OUT for another student,
2. found tampering with the time clocks,
3. fraudulently recording school clinical time in any manner, including recording during paid time in the Radiology Department as a tech assistant,
4. clocking OUT earlier than the approved time by the Program Director or Clinical Coordinator,
5. habitually failing to clock IN or OUT properly according to these stated policies,
6. habitually failing to turn in the time card on a timely basis as stated in these policies.

Failure to turn in a time card will result in 10 points off employability grade for every day the time card is late. Habitual failure to turn in a time card will constitute disciplinary action or dismissal. Failure to clock IN or OUT will be counted as a tardy. Improper clocking IN or OUT or turning in a time card late will be noted and graded accordingly on the Director's report. There SHALL NOT be a called clock IN or OUT for more than one day in a week! If a second call IN is needed, the student must report to the Program Director's office for another time card. If the time card is lost, the student should obtain another one, as soon as possible, from the Program Director/Clinical Coordinator.

STUDENT ATTENDANCE TO SEMINARS/MEETINGS

Students who attend educational seminars and/or meetings, i.e. Atlanta Student Seminar, GSRT Annual Meeting, CSRT Fall Seminar, West Coast Student and Educators Seminar in Orlando, etc., shall abide by the following guidelines and policies:

1. If attending while on clinical time, attendance to all educational sessions is **MANDATORY**.
 - a. All Attendance Verification forms **MUST** be authorized by the session guest speaker, moderator, or Program Director or other Faculty in attendance.
 - b. If time cannot be accounted for, this time will be made up in accordance with the school absentee policy.
 - c. If the student fails to attend a session, the student forfeits any future chance of seminar/meeting attendance on student time.
 - d. Students under the age of 21 are responsible for observing and obeying state laws regarding drinking alcoholic beverages. Any illegal acts are the responsibility of the individual.
 - e. Students are responsible for damages incurred at a seminar/meeting which are the direct result of the student's action.
 - f. Columbus Technical College and/or any of its faculty are not liable for any physical or personal damages or injuries incurred during or en route to or from a seminar/meeting.
 - g. Attendance Verification forms **MUST** be turned in to the Program Director or Clinical Coordinator on the first day of return to school time. If forms are not turned in promptly, the student will be charged with absences for each day unaccounted for (see absence policy).

**Columbus Technical College
School of Radiologic Technology
Attendance Verification Form**

Student Name: _____

<u>Session/Activity Title</u>	<u>Date & Time</u>	<u>Verification Signature</u>
1. _____		
2. _____		
3. _____		
4. _____		
5. _____		
6. _____		
7. _____		
8. _____		
9. _____		
10. _____		

Use additional Verification sheets as needed. Verification Signatures may be that of the speaker, session moderator, Program Director, or Clinical Coordinator.

Verified by: _____ **Title:** _____

Date: _____

CHANGE IN STATUS:

Any changes in name, address, telephone number, marital status, etc. must be made in writing and presented to the Program Director and the Admissions Office of Columbus Technical College within 7 school days of the change. Notification of this information affords the information for name badges, radiation monitoring devices, records, and mailing of information.

Any changes also should be given to the Admissions Office of Columbus Technical College to make sure all information for each student is correct.

Section 5

General Student Policies & Procedures

GENERAL STUDENT POLICIES AND PROCEDURES

DRESS CODE AND GROOMING POLICIES

NOTE:

Students who do not report to duty in proper dress **cannot** stay in school that day and will be released and counted as absent. The following grooming standards are for ALL students, regardless of the clinical assignment. They are designed to promote a professional appearance to the public and patients. Our first and foremost concern is to the patient and our appearance is vital to good public relations for our hospitals and the school. PERSONAL body hygiene is absolutely essential at all times.

UNIFORMS:

Standardized uniforms must be clean and ironed at all times. Appropriate undergarments **MUST** be worn. (Example: all undergarments must be white or flesh-toned. Male students must wear plain white t-shirts under their uniform tops. The sleeves of the t-shirt should not extend out beyond the sleeves of the uniform top. A suggestion is made that male students wear the ribbed type of undershirt with a V-neck. No logo printing or other designs will be tolerated). Lab coats must be clean and ironed. **ONLY** lab coats and uniforms purchased from Meridy's Uniform Company are acceptable (ordering information will be given each student upon acceptance into the program). No sweaters or other jackets will be worn while on actual duty. No long-sleeved t-shirts should be worn under uniform tops, unless instructed to do so by the Program Director/Clinical Coordinator to cover body art/tattoos, and such clothing must match the color of the uniform top to be acceptable. If you get cold, wear your lab coat.

SHOES:

White leather duty shoes or **all white** leather tennis shoes only are permitted to be worn and must be clean and polished at all times. Shoes and shoe strings must be clean. Shoes that are worn out, or defective, torn, or otherwise out of condition do not meet a professional appearance and must be replaced. Sling, backless shoes, or Croc-type shoes are not permitted. The purchase of two pairs of shoes is recommended and all shoes must be approved to meet the Program Dress Code. These standards are for all students, regardless of varying hospital departmental policies. All shoes must be approved by the Program Director/Clinical Coordinator.

SCRUB CLOTHES:

Scrub clothes are worn **ONLY** when the student is on surgery rotation. When you change from your uniform to scrub clothes, remember to wear your radiation dosimetry badge on the scrub top collar. A lab coat **MUST** be worn when dressed in scrubs and should be removed when going in to do a surgery case. The lab coat **MUST** be worn when leaving the O.R. and in all other areas of the hospital as long as scrubs are worn. **NEVER** wear scrub clothes outside the hospital, including to classes. Scrub clothes, which are the property of the hospitals, **SHALL NOT** be removed from the facility for any reason. If the student has the potential to soil his/her uniform, it would be advised to bring an extra uniform to clinical, just in case. This is especially helpful when the weather is bad and the student might get wet coming from the parking lot.

HAIR:

Hair must be clean and neat. If it is shoulder length, or longer, it **MUST** be worn back. If hair falls forward from the neck when you lean over, it must be worn back. This means that hair must be worn in a ponytail, braid, or other acceptable style as discussed in orientation. Barrettes or hair clips that blend in with the hair color should be used. **DO NOT** use bright, large, trendy clips, elastics, bows, ties, hair pins, etc. Hair extensions that do not match the original hair color of the student are not permitted. Wet hair is **NOT** permitted. Males will comply with the same rules. Males may have a mustache and/or beard provided that it is moderate in length and neatly groomed at all times.

HOSIERY/SOCKS:

Females are required to wear white socks or white or skin tone hosiery. **NO** colored or patterned hosiery, socks, or tennis footlets or ankle socks are permitted. White knee highs or light weight trouser socks may be worn with pants uniforms. Males are required to wear plain white calf length socks. All students are required to wear hosiery/socks in an appropriate manner. **NO** ankle socks are allowed.

FINGERNAILS:

Nails should be clean, well-manicured, and **no longer than the length of the finger tips**. No excessively long nails are permitted. Clear nail polish may be worn or nails should be left unpolished. **NO** loud colors of nail polish permitted. Infection control officials suggest that **NO** nail polish be worn as a means to prevent harboring of bacteria. Fingernails have been implicated in the transmission of nosocomial infections and can affect the barrier quality of personal protection equipment, therefore, **artificial nails (acrylic or gel) are not allowed**.

JEWELRY:

Only two rings may be worn. If you are married, your engagement ring and wedding band are considered one. **NO** flashy or gaudy rings or watches are permitted. **NO** bracelets or visible necklaces are permitted. Earrings, if worn, shall be limited to post-type only and only one pair of earrings is allowed. Only small gold, silver, diamond, or white pearls are recommended as acceptable. No loop, circle, or drop styles shall be worn. **NO OTHER JEWELRY, PINS, BADGES, OR BUTTONS WILL BE PERMITTED. ALL PIERCED BODY PARTS MUST BE COVERED.**

BODY ART/TATTOOS:

Body art and tattoos **MUST** be covered and **NOT** visible at any time. This includes when assigned to surgery. There are warmup coats provided in the operating room for use.

MAKEUP AND COLOGNE:

Makeup, colognes, and after-shaves should be worn in moderation, if worn at all. Strong colognes/after-shaves may be offensive to patients and co-workers.

CHEWING GUM, EATING, OR DRINKING:

Chewing gum, eating, or drinking is not permitted while you are with a patient or outside of the lounge/locker or break room areas. Food is never allowed outside the employee lounge in examining room areas.

PHOTO ID/NAME BADGES:

Name ID badges are issued by Columbus Technical College and must be worn clearly and visibly at all times. This includes wearing ID badges to clinical assignments as well as class. **DO NOT** cover up any part of the name tag. Students are identified as students by their school patches and name badges. Students who should need to replace a name badge due to a name change or loss/damage of the name tag must go to the Academic Advisement Center (P-200 in Patrick Hall) at Columbus Technical College for another badge. There may be a charge for replacement of a name badge. Students are prohibited from loaning their name badges to anyone else. Students cannot attend clinical or class without their name badges. Name badges are changed each school year to a different color. Please be sure to renew your badge during that time.

RADIATION DOSIMETRY BADGES:

Dosimetry badges are to be worn on the uniform collar and outside of the lead apron when only one badge is worn. Females who are pregnant are double-badged with the second badge worn at the waist and under the apron. If the student goes to surgery, he/she should wear the Dosimetry badge outside the lead apron in the O.R. and make sure that it is placed back on his/her uniform when changing at the end of the shift. Loss of the dosimetry badge must be reported to the Clinical Coordinator as soon as possible. A replacement badge will be assigned, should this occur.

STUDENT WITHDRAWAL POLICY:

Should a student decide to withdraw from the program for any reason, the following items **MUST** be submitted to the program:

1. Return of the Radiation monitoring badge assigned to the student.
2. Any Time Cards given to the student for the semester.
3. A brief written statement from the student stating his/her intention of withdrawing from the Program. Reasons for withdrawing are requested to be included for documentation, however, the student is not required to state the reason, if private. This statement will be placed in the student's permanent file for reference.
4. Any books loaned to the student from the School of Radiography collection or any library books due the Columbus Technical College Library.
5. A Change of Major should be performed, placing the student into another major other than Rad Tech.

The Program Director will withdraw the student from the program through the proper channels. If the student is not going to continue his/her studies at Columbus Technical College, he/she must also withdraw from the college. All textbooks, uniforms, etc. remain the property of the student.

**Columbus Technical College
School of Radiologic Technology
928 Manchester Expressway
Columbus, GA 31904**

TERMINATION OF ATTENDANCE FORM

REASONS FOR EXIT:

_____ Self - Withdrawal _____ Termination _____ Other

Name _____ Student ID # _____

Date Entered _____ Date of Exit/Termination _____

ACKNOWLEDGEMENT STATEMENT OF SELF WITHDRAWAL:

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

FOR SCHOOL DOCUMENTATION ONLY:

Check when items are submitted and provide date and signature of receipt

<u>Item</u>	<u>Returned</u>	<u>Date</u>	<u>Signature</u>
Radiation Monitoring Badge	_____	_____	_____
Time Cards	_____	_____	_____
School Library Books	_____	_____	_____

STUDENT TRANSFER:

A student wishing to transfer from one Radiography program to another is sometimes permissible. The extent of transfer time, however, is granted at the discretion of the Program Director into which the student is entering. Acceptance of previously attended radiography academic and clinical credits will be on an individual basis.

To be considered for transfer into the Columbus Technical College School of Radiologic Technology Program, the student must:

1. be eligible to return to his/her previously attended collegiate-based radiography program,
2. complete the official application form and submit application fee,
3. request transcripts from high school, colleges, or other post-secondary institutions, and previously attended radiography programs,
4. request copies of previously completed clinical grades and proficiency/competency records,
5. request a letter of written endorsement from the Program Director of the previously attended program, stating the candidate's academic and clinical performance, and attendance record, and
6. be able to meet the stated entry requirements of the Columbus Technical College School of Radiologic Technology (pre-application testing scores and pre-requisite courses).

Final acceptance or rejection of a transfer candidate is dependent upon space available at the time of application and whether the student's academic advancement is compatible with the Program here at Columbus Technical College.

TUITION:

Tuition is due and payable prior to the beginning of classes each semester. These dates are listed in the college catalog on the college website, and can be obtained through the Admission Office/Business Office of Columbus Technical College.

PARKING:

All students are required to park in assigned parking lots at each hospital/clinic and at the college. When parking stickers are required, students are required to attach them to their vehicle(s) as determined by each affiliate site and by the college.

MEALS:

Food must not be taken out of any hospital cafeteria. Meal time will be observed as scheduled. Students are not to arrive at the scheduled time and then go to the cafeteria for breakfast. **Students are not permitted to leave the hospital to pick up food for themselves or the department.**

STUDENT EMPLOYMENT:

In order to pursue the goals of these institutions, especially to provide better patient care, and in meeting the educational achievement needs of the student, the following policies are established. Along with meeting these goals, the Faculty is concerned for the physical and mental capabilities of the student.

1. Student attendance to the program is of utmost importance. Abuse of the Absence Policy or tardiness will not be tolerated. Students who are employed shall make every effort to attend school as a priority over employment.
2. Sleeping in class or poor clinical performance due to lack of sleep will not be tolerated. Working late-night or early morning shifts prior to a school day is not recommended and is dangerous to the welfare of the patient, clinical facility, and the student.

MULTIPLE ENROLLMENTS:

While enrolled in this Program, it is allowed for a student to be enrolled in another program within the college. The faculty suggests that all students devote full-time to their education as Radiologic Technologists. Further training and educational opportunities are available to a program graduate. Information on program and curricula are available to all students in the Career File and through the Program Director.

HOSPITALIZATION INSURANCE:

All students should have hospitalization insurance. If a student should be hospitalized, the respective hospital will collect the insurance benefits. Any expense incurred over and above those paid by insurance are the responsibility of the student, his/her parent or guardian. Students are responsible for all physician and dental bills.

STUDENT TRANSCRIPTS AND RECORDS:

Transcripts of current students and graduates are kept on file in the Registrar's office at Columbus Technical College and are available upon request according to school policy. There may be a charge for the release of a student's transcript to another educational institution, technical program, or prospective employer. No transcript or other official material received by the Program from any applicant or student shall be released to any other institution.

Student records other than transcripts are kept in the program office for future reference. The Program Director or other designated faculty member **MUST** be present when a student wishes to review all or part of their record. No portion of the file will be copied or removed from the program office by anyone without program and student permission. Records shall not be opened to third party inspection without the expressed written consent of the student/graduate. This policy is designed to comply with the regulations under the Family Educational Rights and Privacy Act of 1974 as amended (The Buckley Amendment)

The following safety policies apply to the radiology lab on campus and are posted in the lab area.

Radiology Lab Safety

Students are not allowed in the lab without permission of program faculty and should be accompanied by a faculty member.

No eating or drinking in the lab.

Faculty should turn all power on upon entering and turn all power off when exiting.

Disinfect all equipment before use.

Use proper hand hygiene before positioning your “patient”

Use locks correctly; do not force equipment to move.

Before lowering the table, check and remove obstacles from under the table.

Do not leave stools under the table.

All lab experiments will be performed under direct supervision.

Radiation exposures will be conducted **only** on phantoms or inanimate objects.

Treat phantoms with care to prevent damage. Replacement cost range from \$500 to \$33,000.

Close doors during radiographic exposures.

No horseplay during lab experiments.

During exposures always stand in control booth or behind a barrier wall.

Students must wear dosimeters while conducting experiments in lab.

Before leaving:

- Place all equipment in appropriate storage area including sponges, cassettes, measuring devices, etc.
- Place tube head all the way down close to table on the pillow before turning power off
- Report all damaged equipment to clinical coordinator or program director

Rev. 11/20/17

POLICIES REGARDING STUDENT HEALTH SERVICES: COMMUNICABLE DISEASE/BODY FLUID EXPOSURES

Communicable disease is defined as a disease the causative agents of which may pass or be carried from one person to another directly or indirectly. Examples of such diseases include tuberculosis, hepatitis B, flu, and HIV (AIDS-causing virus). Candidates and students must be aware of the potential of the spread of communicable diseases in the environment of the Imaging Departments and the hospital or clinic. Course work will cover the preventative measures essential for infection control as well as the processes of disease exposure.

The policies and procedures herein described are for the education of the student and shall be used as guidelines for preventing the spread of and the reporting the exposure to any communicable diseases.

CANDIDATE HEALTH SERVICES:

Final candidates being considered by the Program Acceptance Committee will be contacted to schedule a medical examination. The candidate must be able to pass a drug screening test at the time of the medical examination. The expense of the medical examination is the responsibility of the candidate. This will include the medical history, exam, PPD and drug screen.

Accepted candidates will be contacted to schedule a medical examination with their physician. The candidate must be able to pass a drug screening test at the time of acceptance, as required by the affiliate clinical sites students will be going to for clinical education. Students should also begin the process of Hepatitis B Vaccination prior to the official date of attending the program. The cost of each injection is the responsibility of the student. The vaccine series consists of three injections and is given at approximately two month intervals and must be completed within the first six months of the Program. Any student can sign a declination form in order to forego vaccination. This is not recommended as students will come in contact with patients who have communicable diseases during the clinical training experience.

Accepted students must submit current and up-to-date immunization records. These records may be obtained from the local health department in the form of titers for childhood diseases, or from the candidate's physician or military record, if applicable.

Enrolled students exposed to a communicable disease while on duty will receive the appropriate diagnostic test and prophylactic treatment for the specified disease. All requisitions for professional services (laboratory and x-ray tests) that are required by these policies will be done.

If any follow-up treatment is required as a result of exposure to communicable disease, the student will be responsible for the procedures and expenses.

PROCEDURE FOR REPORTING EXPOSURE:

When a student is exposed to a communicable disease, the following action will be taken:

1. Student notifies the appropriate Clinical Instructor
2. An occurrence report is completed.
3. The student will go to the appropriate facility for any necessary emergency treatment.
4. School faculty notifies Infection Control.

When a student is exposed to a tuberculosis patient, the following action will be taken:

1. The Infection Control Officer (at the hospital) identifies those students potentially exposed and notifies the School Office.
2. The student is advised by Program faculty and sent to Infection Control at Columbus Technical College for a baseline PPD (purified protein derivative – tuberculin) if there has not been such a test in the last six months.
3. The student must report back in 2 – 3 days for a follow up reading.
4. If the student already has a positive PPD, a chest x-ray will be recommended as a baseline. If the chest report is negative, the student will only need a chest x-ray every 5 years thereafter, unless further exposure is identified or the student has symptoms.

NOTE: “Exposure” to TB occurs when one remains in the same room for more than 5 minutes with a TB patient who has been coughing and is not wearing a mask. If isolation technique was observed (patient was wearing a mask), exposure has NOT occurred.

Sharps Injury Report

- 1. Date and time of exposure incident:**
- 2. Type and brand of sharp involved in the exposure incident:**
- 3. Job classification of exposed employee/student:**
- 4. Department or work area where the exposure incident occurred:**
- 5. The procedure that the exposed employee/student was performing at the time of the incident:**
- 6. How did the incident occur:**
- 7. The body part involved in the exposure incident:**
- 8. Did the sharp have engineered sharps injury protection?**
If so, was the protective mechanism activated?
Was the protective mechanism activated before activation of mechanism, during activation of mechanism or after activation of the mechanism, if applicable?
- 9. If the sharp had no engineered sharps injury protection, what was the opinion of the employee/student as to whether and how such a mechanism could have prevented the injury, as well as the basis for the opinion:**
- 10. What is the opinion of the employee/student about whether any other engineering, administrative, or work practice control could have prevented the injury, and the basis for the opinion:**

Infection Control Coordinator

Date

COLUMBUS TECHNICAL COLLEGE

EXPOSURE INCIDENT EVALUATION AND FOLLOW-UP FORM

For

Accidental Exposure to Blood or Other Infectious Body Fluids

Name of person exposed _____ SSN _____

Date of Incident _____ Circle one: Student Staff Faculty Other

Location of Incident _____

Source of Exposure _____ PPE Used _____

Route of Exposure _____ Date occurred _____

Describe circumstances of exposure incident: _____

FOLLOW-UP:

____ Person involved in incident is referred to private physician, health department, or other licensed health care provider for status assessment, testing and counseling.

____ Documentation of follow-up is on file at the college.

Employee/student is informed of:

____ potential risk of HIV or HBV transmission

____ test results from source individual (if tested)

____ results of blood tests and medical evaluations

____ medical condition(s) resulting from the incident requiring further evaluation or treatment

____ medical information is to be considered strictly confidential

____ need for blood testing and immunization therapy

____ advice to report any illness which occurs in the follow-up period

____ to refrain from donating blood or organs during follow-up

____ to abstain from/or use protective measures during sexual activities

____ (if female) not to breast feed

____ to keep all follow-up medical appointments

Name and address of Physician or agency providing follow-up care _____

Recommendations for avoiding re-injury: _____

Name of Person Preparing this Report: _____ Title _____

COLUMBUS TECHNICAL COLLEGE
Columbus, GA 31904

ACCIDENT REPORT FORM

PATIENT INFORMATION:

Name: _____ Dept: _____

Address: _____

Sex: M ___ F ___ Age ___ Place of Accident: Building ___ Grounds ___ Other _____

RESPONSIBLE PERSON/NEXT OF KIN:

Name: _____ Phone: _____

Relationship: _____ Was responsible person notified: Yes ___ No ___

By whom notified: _____ Date: _____ Time: _____

TYPE OF INJURY/ILLNESS: (Briefly describe)

AREA OF INJURY:

- | | |
|---|---------------------------------------|
| 1. <input type="checkbox"/> Head | 7. <input type="checkbox"/> Back |
| 2. <input type="checkbox"/> Face | 8. <input type="checkbox"/> Chest |
| 3. <input type="checkbox"/> Eye | 9. <input type="checkbox"/> Abdomen |
| 4. <input type="checkbox"/> Neck | 10. <input type="checkbox"/> Pelvis |
| 5. <input type="checkbox"/> Left Shoulder, Arm, Hand | 11. <input type="checkbox"/> Buttocks |
| 6. <input type="checkbox"/> Right Shoulder, Arm, Hand | 12. <input type="checkbox"/> Other |

EMERGENCY CARE RENDERED:

- | | | |
|---|---|--|
| 1. <input type="checkbox"/> Oral Airway | 5. <input type="checkbox"/> Spinal Immobilization | 9. <input type="checkbox"/> Obstetrical-Delivery |
| 2. <input type="checkbox"/> C.P.R | 6. <input type="checkbox"/> Applied Splint | 10. <input type="checkbox"/> Refused Treatment |
| 3. <input type="checkbox"/> Controlled Bleeding | 7. <input type="checkbox"/> Applied Traction | 11. <input type="checkbox"/> Other _____ |
| 4. <input type="checkbox"/> Bandaged Wounds | 8. <input type="checkbox"/> Applied Restraints | |

ACTION TAKEN ON ACCIDENT:

- | | |
|------------------------|-----------|
| 1. EMS Phoned | (By Whom) |
| 2. First-Aid Treatment | (By Whom) |
| 3. Sent Home | (By Whom) |
| 4. Sent to Physician | (By Whom) |
| 5. Sent to Hospital | (By Whom) |

Name of Hospital: _____

SCHOOL INFORMATION

Reported By: _____ Department: _____

Witness: _____ Date: _____ Time: _____

COMMENTS:

Infection Control Coordinator: _____

Date: _____

11/20/17

Columbus Technical College
Radiologic Technology
Lab Management Plan

General laboratory rules as described in the Laboratory Management System information will be provided to the student during the initial lab class. All procedures will be demonstrated, students will be given adequate practice time, and then each student will be checked off on each procedure discussed in class according to the schedule that is provided in the class syllabus each semester. Once students are checked off in lab, they are then allowed to perform those procedures on patients in the clinical setting for proficiencies during each semester **under direct supervision**. Students will be given the opportunity to review and practice each competency prior to performance. To complete RADT 1010, RADT 1030, RADT 1060, and RADT 2090 for a grade, the lab skills for each must be completed. Students must attain a score of at least 85% to be considered competent in a specific procedure. Once the student has performed and been checked off as competent in a specific procedure and has practiced and performed the procedure in the clinical setting on a live subject to the evaluator's satisfaction, he/she can then perform that procedure under indirect supervision as described on page 41 of this manual. The schedule of lab performance and competencies in the lab are posted for all radiographers in the affiliate clinical sites for reference and review.

Students will not practice procedures in the lab without proper supervision by an instructor. Appropriate personal protective equipment such as lead aprons and gloves are available in the lab room. Students are not to hold phantoms during radiation exposure. No student is to perform any procedure on a live subject. Only phantoms can be used should exposures be required.

Columbus Technical College
Radiologic Technology
Laboratory Management System

I. Management of Students in Laboratory:

- A. Students are not to be in lab area performing procedures unless an instructor is present.
- B. Students and instructors are to conduct themselves in a professional manner. Horseplay, inattentiveness, and negligence are prohibited.
- C. Students are to follow all safety regulations.

II. Laboratory Cleanliness/Maintenance:

- A. All students and instructors must wash hands before and after each simulated procedures.
- B. Laboratory equipment must be cleaned with the appropriate cleaning material before and after each simulated procedure.
- C. Students should not attempt to troubleshoot or repair malfunctioned equipment and /or laboratory devices. All equipment malfunctions and/or improper functioning laboratory devices should be reported to an instructor.
- D. All laboratory supplies/devices must be properly stored at the end of each laboratory session.
- E. No eating or drinking in the lab area.

III. Radiation Safety:

- A. All students must receive and follow radiation safety instructions, as well as proper equipment training before operating radiation producing equipment. During exposures always stand in control booth or behind a barrier wall.
- B. All students and instructors must wear their assigned radiation monitoring device when present in the laboratory area.
- C. All radiation exposures must be made using the quality assurance devices, phantom body parts, or the phantom mannequin.
No radiation exposure should ever be produced using live or actual persons.
- D. An instructor must be present when all radiation exposures are produced (direct supervision).
Close doors during radiographic exposures.

IV. Equipment Operation/ Maintenance:

- A. Use locks correctly; do not force equipment to movement.
- B. Before lowering the table, check and remove obstacles from under the table, please do not leave stools under the table.
- C. Place tube head all the way down close to table on the pillow before turning power off.
- D. Treat phantoms with care to prevent damage. Replacement cost range from \$500 to \$33,000.

**Radiologic Technology
Lab Agreement**

I, _____, have read and understand the Radiologic
 Print Name
Technology Laboratory Management procedure as stated and I have been given a copy
of the policy for future reference.

**I agree to abide by the rules stated in the Laboratory Management procedure for
Radiologic Technology.**

Signature

Date

Section 6

Disciplinary Action Student Counseling

DISCIPLINARY ACTION:

Enrollment in this program is on a voluntary basis. However, because of the nature of this profession and educational program, the student assumes certain obligations and responsibilities of performance and behavior.

Every possible act of misconduct cannot be specified. However, the program has listed the following for all students who violate the rules and regulations of the Program. Candidates who are considering the Program are requested to read this manual. After those candidates who have been accepted have been so notified, they are required to report for an orientation session. In these sessions, the Policy and Procedure manual is reviewed and explained and is considered a time of fair warning regarding the rules of conduct.

CATEGORY ONE - OFFENSE/REASONS FOR DISCIPLINARY ACTION

Violations of these rules are serious in nature and may result in **Immediate Dismissal**. A student dismissed for a Category One is **NOT** eligible to return for enrollment in the Program.

1. Fraudulent completion of clinical assignments(s) to include Time & Attendance Cards
2. Failure to complete and/or submit academic and clinical assignments.
3. Sleeping while on clinical assignment.
4. Cheating on an academic examination.
5. Reporting to academic or clinical assignment under the suspected influence of alcohol or illegal substances.
6. Reporting to academic or clinical assignment in the possession of alcohol or any illegal substances.
7. Use of alcohol or illegal substances while on hospital property for academic or clinical assignment.
8. Exchanging of clinical assigned time without the proper permission.
9. Leaving any clinical assignment at any clinical site without the permission of the Program Director/Clinical Coordinator or Clinical Instructor, in the absence of either program official..
10. Theft of hospital, patient or employee property.
11. Willful destruction of hospital, patient or employee property.
12. Conviction of a felony.
13. Arrest and charge with a felony.
14. Arrest and conviction with illegal use, possession or distribution of illegal substances.
15. Insubordination to include refusal to perform assigned task or obey instructions.
16. Negligence or deliberate oral or physical abuse in the care and treatment of patients, guest, students, or employees.
17. Breach of confidential information.
18. Falsification of any official college or hospital record.

19. Immoral or lewd conduct on college or hospital property.
20. Possession of firearms or weapons on college or hospital property.
21. Smoking on college or affiliate clinical campus grounds (even in one's car).

CATEGORY TWO - OFFENSE/REASONS FOR DISCIPLINARY ACTION:

Violations of these rules are considered in a range of less serious to serious in nature. However, depending on the severity of the offense or multiple offenses, the progressive discipline process may be omitted and suspension or termination may be immediate. The range of discipline for the following will be written documentation reprimand, suspension and/or dismissal.

1. Failure to report for clinical assignment.
2. Failure to attend an academic class.
3. Failure to report illness to school, i.e. notify the program office and the clinical assignment as stated in Student Handbook.
4. Multiple and Excessive absences.
5. Excessive tardiness (over 3 times in a semester). Tardy is defined as 7 minutes beyond scheduled duty time
6. Sleeping in class.
7. Continued late completion and/or submission of academic and/or clinical assignment.
8. Loitering in non-assigned areas at any clinical assignment.
9. Eating, drinking or chewing gum in non-designated areas
10. Horseplay and unprofessional conduct or behavior in and around patient care areas
11. Abusing the assigned time and request in observing a lunch period.
12. Use or excessive use of hospital telephones or equipment for personal calls or use.
13. Inappropriate reporting to clinical or academic assignment: If in improper attire, appearance or in breach of the grooming policy, the student will be requested to leave the premises. This includes uniform, shoes, lab coat, hosiery, hair, fingernails, jewelry and all other areas described in the grooming policy as stated in the Student Handbook.
14. Continued violation of dress code policy will result in dismissal.
15. Unsatisfactory attitude
16. Breach of professional confidence.
17. Neglect or abuse of patients, visitors, employees or students
18. Use of profanity in the presence of patients, visitors or others.

CATEGORY TWO: “CONTINUED” OFFENSES/REASONS FOR DISCIPLINARY ACTION:

19. Violation of other hospital policies not named here but to include:
 - a. Solicitation or acceptance of remuneration from patients, visitors and/or doctors
 - b. Willfully giving false statements to supervisors and administrative personnel
 - c. Political activity on hospital property
 - d. Inability to medically or physically perform current student assignments
 - e. Disorderly conduct, fighting or instigating a fight on hospital property
 - f. Vending, soliciting or conducting business on hospital property
 - g. Sexual harassment
 - h. Violation of safety regulations
 - i. Failure to wear ID badge and the Radiation Dosimetry Badge in the appropriate required manner
 - j. Violation of hospital parking regulations
 - k. Use of cell phones in clinical settings
20. Violation abuse and/or loss of hospital or school property. Requires instruction from Department Director and Hospital Administration/School Administration as to cost of reimbursement for replacement and/or other disciplinary action.

**COLUMBUS TECHNICAL COLLEGE
SCHOOL OF RADIOLOGIC TECHNOLOGY
STUDENT COUNSELING AND DISCIPLINARY ACTION FORM**

Student Name: _____ Date: _____

_____ Written Notification

_____ Warning

_____ Semester Counseling Session

_____ Suspension: # Days ____

_____ Verbal Counseling Documentation

_____ Dismissal

_____ Corrective Action Report

OFFENSE: _____ 1st _____ 2nd _____ 3rd

SUPERVISOR'S STATEMENT: The above named student was notified/counseled with the clinical evaluation/Director's Report on _____ regarding:

Supervisor's Signature: _____ Date: _____

Program Director's Statement:

Director's Signature _____ Date: _____

STUDENT COUNSELING

The faculty members encourage students to consult with them at any time regarding questions, problems or comments. Students may approach the faculty during clinical assignment hours in the Radiology Department or school office as well as before and after class sessions.

CLINICAL: Counseling regarding clinical deficiencies or questions is handled regularly through the weekly evaluation forms. If deemed necessary and/or requested by the student, a conference is set up between the program faculty, student and/or involved/appropriate staff technologists(s).

ACADEMIC: Counseling regarding academic deficiencies or questions is handled through conferences between the appropriate faculty member(s) and the student as deemed necessary by the individual course instructors and/or Program Director.

Test papers are often used as a means of informing students of current test averages.

CORRECTIVE ACTION: If a student incurs an infraction necessitating disciplinary action, a Student Counseling and Disciplinary Action form will be completed on each student to include a synopsis of clinical and academic performance and attendance. If a student is deficient, he/she shall be placed on probation and counseled in order to encourage improvement. If clinical and/or academic performance does not meet the minimum passing grade, the student will be placed on **EXCLUSION** (elimination from the program).

Students are reminded of the Disciplinary Action Section of this handbook as well as the stated Problem Solving Procedures.

STUDENT COMPLAINT/GREIVANCE POLICY

Columbus Technical College will receive and respond to complaints concerning the construction or administration of laws, policies, standards, or procedures related to Columbus Technical College and the School of Radiologic Technology. The college prohibits retaliation in any form for the filing of a complaint, the reporting of instances of discrimination, or for participation in these complaint procedures. The complaints include ones filed by faculty, students, parents and the public. This procedure can be used for civil rights complaints. All Title IX complaints shall be handled in a confidential manner to the fullest extent prescribed by law. Every attempt will be made to limit the distribution of information to those people with a need-to-know within the confines of the college and agency reporting procedures and the investigative process. Students making appeals for disciplinary actions should refer to Appeal Procedures in Student Rights and Responsibilities in the Columbus Technical College Student Handbook and Catalog. The following procedures are to be used in seeking resolution of complaints and grievances:

Step 1: Hold an informal discussion on the complaint with the instructor/program director. Records of the relevant factors should be kept in case a formal written charge is made.

Step 2: If the complaint is not resolved, the student may write a formal complaint to the Dean of Health Sciences and Nursing in the Robert L. Wright Health Sciences Bldg, for discussion and resolution. To speak with someone outside of instruction, please contact the Director of Community Education and Special Populations in the Hartline Administration Building.

Step 3: If the complaint is not resolved in Steps 1 and 2, a formal complaint may be submitted in writing to the Director of Community Education and Special Populations in the Hartline Administration Building. This should be done within 10 days of a ruling from the Dean.

Step 4: After conducting an investigation of the complaint, the appropriate vice president will issue a decision within ten (10) working or school days.

Step 5: An appeal of the decision of the vice president cited in Step 4 should be made in writing to the President of Columbus Technical College within ten (10) working days after receiving notification of the denial. The President of the college will send a reply to the aggrieved party within ten (10) working or school days of having received the charge. The President's determination is final.

The student should continue to attend classes until the grievance has been resolved unless otherwise advised.

See CTC Catalog for more detailed information

<https://columbustech.smartcatalogiq.com/2016-2017/2016-2017-Catalog-and-Student-Handbook/Student-Handbook/Student-Activities-and-Services/Grievance-Procedure>

Reviewed and Revised 11/20/17

STATEMENT FROM THE PROGRAM DIRECTOR SCHOOL OF RADIOLOGIC TECHNOLOGY

Students agree to comply with the policies stated in this handbook when they sign the Student Acknowledgement Form (see next page) after reviewing the Student Handbook during orientation.

Students must satisfactorily complete the full 4 semesters of academic and clinical education prior to being eligible to take the national certification examination of the ARRT. This is a ruling of the American Registry of Radiologic Technologists.

Students not completing all educational requirements by the date of graduation will not be eligible or permitted to participate in the graduation ceremony. Students will not receive their degree until all of the educational requirements have been satisfactorily completed.

POLICIES AND PROCEDURES of Columbus Technical College will be followed. A copy of these policies can be found in the college catalog by going to the college website. www.columbustech.edu.

All students are on probationary status during the first six months of the program. An evaluation of academic and clinical performance at the end of each semester is reviewed by the program faculty, and, if necessary, will include review by the Dean of Health Sciences and Nursing and the Vice President of Academic Affairs for Columbus Technical College. Counseling with the student is conducted as deemed appropriate.

If a student's work has been unsatisfactory he/she may be placed on Academic Exclusion (which means elimination from enrollment in the program).

If it becomes evident to the faculty that a student's attitude and/or aptitude for a career in Radiologic technology is unsuitable, the student will be so advised and requested to withdraw from the program in the best interest of both him/herself and the program.

A student does NOT need to be in a probationary or suspension status to be dismissed. The program director/school reserves the right in every case to dismiss any student at any time for infractions of the stated policies of the Program Policies and Procedures or of any of the hospitals involved in the clinical education of the program and/or the following:

- A. insubordination
- B. inability to maintain an academic average of C in each didactic course or a clinical average of 80 (B) or above for each semester
- C. failure to develop those qualities considered essential to the ethical practice of Radiologic Technology
- D. failure to follow the policies and procedures of the school, program, Imaging Departments assigned, and/or any clinically affiliated hospital/clinic.

**COLUMBUS TECHNICAL COLLEGE
SCHOOL OF RADIOLOGIC TECHNOLOGY
STUDENT ACKNOWLEDGMENT**

The undersigned student acknowledges that he/she understands the following in regard to the program sponsored by Columbus Technical College:

1. The program does not involve an employer-employee relationship.
2. The Student is not entitled to wages for any educational training time in the program.
3. The program is for the benefit and education of the student.
4. The student has read and understands the Standards of Ethics as published by The American Registry of Radiologic Technologists (ARRT). This document includes the Code of Ethics and Rules of Ethics and is revised periodically by the ARRT and published annually in the ARRT Primary Examination Handbook and available on their website at www.arrt.org. The Rules of Ethics are also directed to candidates who may become applicants when meeting the eligibility requirements and make application to write the national certification examination administered by the ARRT.
5. Neither Columbus Technical College nor any clinical affiliate hospital/clinic is obligated to the student for employment upon completion of the program.
6. The student understands that the first six months of the program is probationary for all students.
7. The program reserves the right to dismiss a student at any time during the training period. If it becomes evident to the faculty that the student's attitude or aptitude for a career in Radiologic Technology is unsuitable, the student will be advised and required to withdraw from the program in the best interest of him/herself and the program.
8. I have read and understand the grading system and the policies governing probation and exclusion as stated in the Student Handbook. I know that I must maintain a grade of C or above in each academic course and an 80 (B) or above in clinical assignments/courses in order to remain enrolled in the program.
9. I understand the attendance policies and know that for any day or time missed due to absence, I will be required to make up that time at the end of each semester where absences have occurred and will be assigned to clinical duty by the clinical coordinator/program director.
10. The school/program does not make refunds to students not completing the course to include tuition, textbooks, and uniforms. Textbooks and uniforms remain the property of the student.
11. The student agrees to comply with the rules, regulations, and procedures of the program and the hospitals/clinics as stated in the Student Handbook of the program. These rules and regulations have been discussed and explained during orientation.
12. Students shall pay the specified amount of tuition and assigned fees per semester to Columbus Technical College for each of the four (4) semesters enrolled, and for the semesters required to complete any pre-requisite classes prior to acceptance.

13. The student must provide his/her own uniforms, shoes, meals, housing, transportation, and other expenses.

14. The student is solely responsible for his/her own transportation to and from clinical assignments and classes. Columbus Technical College is not responsible for damages or injuries to the students and/or others in the event of an accident occurring while en route to or from any school related activity.

15. The student understands that items issued such as radiation monitoring badges, time cards, any books loaned to the student from the School of Radiography collection, or any library books due to the Columbus Technical College library must be returned upon exiting the program.

16. Copies of student records can be released to a third party ONLY with signed written consent from the student. All original student records are the property of Columbus Technical College.

While the provisions of this statement and the rules and regulations of the program and hospitals/clinics will ordinarily be applied as stated, Columbus Technical College and the School of Radiologic Technology reserve the right to change any policy or procedure without prior notice. Every effort will be made to keep the student advised of any such changes by having the student sign an acknowledgement of receipt of any information/policy/procedure change.

Acknowledged by _____ Date _____
(Student Signature)

Witnessed by _____ Date _____
(Signature)

Section 7

Graduation and Professional Information

GRADUATION GOALS AND REQUIREMENTS

REQUIREMENTS TO BE COMPLETED AND/OR SUBMITTED:

The following requirements **MUST** be met by the graduating student in order to participate in graduation ceremonies and receive a diploma:

1. Clinical proficiencies completed
2. Attended and completed all academic assignments
3. Incomplete grades removed from record as outlined
4. Hospital and Program Library textbooks and materials returned
5. Absences or make up days arranged and completed according to policy
6. Radiation monitoring badges returned
7. Resolution or reimbursement for any lost or damaged school or hospital/clinic properties
8. Demonstrated competency of achievement with a minimum score of 75 on at least **TWO** Simulated Registry Exams **OR** a minimum grade of 75 on **One** Simulated Registry Exam **AND** achievement of a minimum of 75 in **EACH** test subject category on administered Simulated Registry Exams. (This competency is stated in Section II).
9. Satisfactory completion and clearance of all school time and attendance.

The above must be completed and/or submitted as announced by the Program Director in order to participate in the official graduation ceremony and receive a degree. A Termination Form will be completed by the Program Director on each student who completes the program, including any job information acquired from the student, for statistical purposes with the CARE Center Career Connections Coordinator of Columbus Technical College.

ABSENCES AND MAKEUP TIME:

Students who have clinical absences which have not been made up by the end of the fourth (last) semester will receive an Incomplete in their final Clinical Radiography course until those absences have been made up. At that time, a final grade will be given for the course and the students will become eligible for graduation and their degree, as well as eligible to sit for the national certification exam with the ARRT. Students are required to make arrangements to schedule make up time with the Clinical Coordinator.

EARLY OUT POLICY AND ELIGIBILITY:

Students may be eligible for an early out of the clinical requirements of the program if they meet the following requirements:

1. Students must have satisfactorily completed ALL clinical and educational requirements described in Section VIII of the Student Handbook and have NO makeup days to complete.
2. Students having AIP Earned Time days NOT taken by the end of the Program would be able to take these days as replacement for the last scheduled clinical days.

Graduating students who meet the state eligibility requirements for the early out policy may take the number of school days established by the Program Director and counting back from the last required date of attendance for the Program. Early Out candidates are required to attend all scheduled academic activities.

APPLICATION TO AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGISTS (ARRT):

Consult the explanation regarding the application process which is described further in this Section (VII) of the Student Handbook. Additionally, the Program is issued the Examinee Handbook by the ARRT and provides one copy of the application with instructions to each of the graduating students. The examinee Handbook describes in detail the eligibility for certification, and application and procedures, rules and ethics as required by the ARRT. It is the responsibility of the student to read and be familiar with this information prior to the completion of the Program.

AWARDS CEREMONY:

Radiology students who satisfactorily complete the program are eligible to participate in receiving awards. The Awards Ceremony is usually held a few weeks before the end of the program. Students will be receive honors befitting their accomplishments during the Awards Ceremony. Students not eligible for graduation are ineligible for an award. All students will be required to dress in clinical uniform and follow the guidelines set by the program for appearance, as if going to their clinical assignment. The following awards will be presented:

The Judith K. Williams Academic Achievement Award:

This award is given for the highest academic average achieved for the Program.

Perfect Attendance Award:

This award is given for perfect attendance for the entire program with **NO** absences (Exceptions: Bereavement, AIP Days, and Military Service/Jury Time).

The Dorothy R. Freeman Technologist Award:

Staff Radiographers at the Clinical Affiliate Sites vote for the eligible graduate on the following basis:

- Technical Ability
- Assuming Responsibility
- Attitude
- Cooperativeness
- Initiative

The JRCERT Certificate of Excellence Award:

The certificate for this award is given by the Joint Review Committee on Education in Radiologic Technology and is awarded for outstanding achievement in scientific research written by an eligible graduate.

GRADUATION:

Students and their family and friends are invited to the Columbus Technical College Graduation Ceremony at the beginning of Summer Semester for Spring Semester graduates. Graduates will receive accolades for accomplishing completion of the program during this time. Students can pick up their degrees in the Registrar's Office at a time designed by that department or the degree will be mailed, if preferred. Graduation is a school activity and those students participating in the formal ceremony are required to follow all policies of the college and program prior to and during the activity to include the following:

1. All students and graduates are required to adhere to the college dress code.
2. Any student suspected of being under the influence of alcohol shall face possible exclusion from the ceremony and requested to leave the premises.

**Columbus Technical College
School of Radiologic Technology
928 Manchester Expressway
Columbus, GA 31904**

TERMINATION OF ATTENDANCE FORM

REASONS FOR EXIT:

_____ Self -Withdrawal _____ Termination _____ Other

Name _____ Student ID # _____

Date Entered _____ Date of Exit/Termination _____

ACKNOWLEDGEMENT STATEMENT OF SELF WITHDRAWAL:

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

FOR SCHOOL DOCUMENTATION ONLY:

Check when items are submitted and provide date and signature of receipt

<u>Item</u>	<u>Returned</u>	<u>Date</u>	<u>Signature</u>
Radiation Monitoring Badge	_____	_____	_____
Time Cards	_____	_____	_____
School Library Books	_____	_____	_____

PROFESSIONAL ORGANIZATIONS:

Columbus Society of Radiologic Technologists:

All students are encouraged to be members of the local Society. There is a nominal fee for membership. Students may have the right to vote and may hold the office Secretary-Treasurer.

Georgia Society of Radiologic Technologists:

Students are encouraged to be members of the state society during the 24 months of the educational program. Membership applications can be obtained thru the Program Office, or on the GSRT website at www.gsrt.org.

American Society of Radiologic Technologists:

Students are encouraged to become student members of the national society during the 24 months of the educational program and continue their membership as R.T.s after graduation and certification. Membership dues are the responsibility of the individual student.

Website: www.asrt.org.

JOB PLACEMENT:

The Program Director and Faculty of the Program are very interested and willing to assist students in locating positions of employment after graduation. Openings may be available at the Clinical Affiliate sites or other neighboring medical institutions and doctors' offices and clinics. Notices of job openings are received often through the Program Office and this information is sent out to the graduates. **NO APPLICANT OR STUDENT IS GUARRANTEED A JOB BY THE PROGRAM, SPONSOR, OR AFFILIATE HOSPITALS/CLINICS.**

CONTINUED EDUCATION:

Upon completion of the program in Radiologic Technology, a graduate may enter the fields of Radiation Therapy, Nuclear Medicine, Diagnostic Medical Sonography (Ultrasound), Computed Tomography (CT), Mammography, Magnetic Resonance Imaging (MRI), or Radiologist Assistant. There are programs in these specialties in the state and in other areas of the country. The Career File in the Program Office contains brochures, applications, and other information about these programs. The faculty is very interested and willing to assist students interested in continuing their education in medical imaging. Additional formal training in the specialties allows the student to take the American Registry of Radiologic Technologists exams and other certification tests to insure professional recognition. The career file also contains information on several college degrees a program graduate may pursue.

The CARE Center at Columbus Technical College offers many helps in preparing the graduate for job application, including resume writing and interview skills.

Columbus State University (CSU):

Graduates of the Program, after passing the national certification exam, may apply to CSU and receive academic credit towards a Bachelor of Science degree in Health Science and continue into a Masters level education, if desired.

Emory University (Atlanta):

Graduates may apply to Emory University and receive credit for their AAS degree towards a Bachelor of Science degree in Radiologic Science, Computed Tomography (CT), or Magnetic Resonance Imaging (MRI).

Troy State University (Phenix City, AL or Troy, AL online):

Graduates may apply to Troy State and receive credit for their AAS degree towards a Bachelor degree.

CERTIFICATION

THE AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGISTS

The following is information provided to enrolled students and graduates of the program who are eligible for the certifying examination of the American Registry of Radiologic Technologists. This certification is voluntary but strongly encouraged for professional recognition and advancement. Upon notification of satisfactorily passing the Registry, the graduate is recognized as a Registered Technologist and has the privilege of using the abbreviations “R.T.(R) ARRT” after his/her name. Most institutions prefer to hire only those individuals who are R.T.s. Non-registered technologists usually receive less compensation. The Federal Government requires that technologists be registered to work in their facilities and also be a graduate of a JRCERT Accredited Program, according to their website.

In January 2000, the ARRT began the use of computer-based testing (CBT) through Pearson Vue Testing Centers, for the administration of all its examinations. The CBT services have been contracted at numerous testing centers nationwide so that most candidates may schedule exams near their homes and at a convenient time for them. According to the ARRT, CBT will plan to be offered six days per week for 52 weeks during the hours of 9 AM and 5 PM.

The application process requires that the examinee complete an application for examination. Candidates will be assigned a 90 day testing window during which the individual may participate in the examination. Candidates will be able to apply prior to graduation but must officially graduate before being deemed eligible to sit for the examination.

CBT provides the opportunity to administer questions in random order with each exam taken by any candidate. For all CBT exams in Radiography, candidates will be provided with a basic, non-programmable calculator by the test center personnel. Personal calculators will be prohibited.

The exam is a two hundred question, multiple-choice format test. Below is the breakdown of the categories of questions currently used by the ARRT (as of January, 2014):

Patient Care.....	33
Safety, inc. Radiation Physics & Protection	53
Image Production.....	50
Procedures	<u>64</u>
200 questions total	

Each exam also includes an additional 20 unscored pilot questions.

SI units will become the primary (principle) units of radiation measurement on the registry exam in 2017.

Registry preparation and review activities are conducted as scheduled during the fourth (Spring) semester. Attendance to all activities is required. Simulated Registry exams are scheduled to assist the student in preparation for the ARRT registry exam. Further study and preparation for the ARRT exam is the responsibility of the student. The required application fees for the exam and the mailing of the application is the sole responsibility of the student.

Section 8

Standards for an Accredited Program

Standards for an Accredited Educational Program in Radiologic Sciences

The following pages contain the JRCERT Standards for an Accredited Program in Radiologic Technology.

In accordance with the Joint Review Committee on Education in Radiologic Technology regarding allegations of non-compliance with JRCERT Standards the following policy assures timely and appropriate resolution of complaints.

It is the responsibility of the Radiologic Technology Program to follow the standards set forth by the JRCERT. **Allegations of non-compliance may be made using the following guidelines:**

1. Hold an informal discussion on the complaint with the program director and then with the division chair. Records will be kept in case a formal written charge is made. If complaint is not resolved informally step 2 is required.
2. A written letter of non-compliance allegations must be submitted to the program director stating the complaint and the accreditation standard of which the complaint is against.
3. The program director will investigate to determine if the complaint relates to program compliance within 20 days of receiving the complaint.
4. If yes - resolution of non-compliance. The Advisory Committee will meet to resolve the non-compliance complaint in a timely manner – within 30 working days.
5. If the complaint is not resolved in a timely manner a written letter may be sent to the JRCERT
6. Records of complaints and resolutions will be maintained in the office of the school of Radiologic Technology.

Standards for an Accredited Educational Program in Radiography

EFFECTIVE JANUARY 1, 2014

Adopted by:
**The Joint Review Committee on Education
in Radiologic Technology – October 2013**



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The Joint Review Committee on Education in Radiologic Technology (JRCERT) is dedicated to excellence in education and to the quality and safety of patient care through the accreditation of educational programs in the radiologic sciences.

The JRCERT is the only agency recognized by the United States Department of Education (USDE) and the Council on Higher Education Accreditation (CHEA) for the accreditation of traditional and distance delivery educational programs in radiography, radiation therapy, magnetic resonance, and medical dosimetry. The JRCERT awards accreditation to programs demonstrating substantial compliance with these **STANDARDS**.

Introductory Statement

The Joint Review Committee on Education in Radiologic Technology (JRCERT) **Standards for an Accredited Educational Program in Radiography** are designed to promote academic excellence, patient safety, and quality healthcare. The **STANDARDS** require a program to articulate its purposes; to demonstrate that it has adequate human, physical, and financial resources effectively organized for the accomplishment of its purposes; to document its effectiveness in accomplishing these purposes; and to provide assurance that it can continue to meet accreditation standards.

The JRCERT accreditation process offers a means of providing assurance to the public that a program meets specific quality standards. The process helps to maintain program quality and stimulates program improvement through program assessment.

There are six (6) standards. Each standard is titled and includes a narrative statement supported by specific objectives. Each objective, in turn, includes the following clarifying elements:

- **Explanation** - provides clarification on the intent and key details of the objective.
- **Required Program Response** - requires the program to provide a brief narrative and/or documentation that demonstrates compliance with the objective.
- **Possible Site Visitor Evaluation Methods** - identifies additional materials that may be examined and personnel who may be interviewed by the site visitors at the time of the on-site evaluation to help determine if the program has met the particular objective. Review of additional materials and/or interviews with listed personnel is at the discretion of the site visit team.

Following each standard, the program must provide a **Summary** that includes the following:

- Major strengths related to the standard
- Major concerns related to the standard
- The program's plan for addressing each concern identified
- Describe any progress already achieved in addressing each concern
- Describe any constraints in implementing improvements

The submitted narrative response and/or documentation, together with the results of the on-site evaluation conducted by the site visit team, will be used by the JRCERT Board of Directors in determining the program's compliance with the STANDARDS.

Standards for an Accredited Educational Program in Radiography

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Standard One

Integrity

Standard One: **The program demonstrates integrity in the following:**

- **Representations to communities of interest and the public,**
- **Pursuit of fair and equitable academic practices, and**
- **Treatment of, and respect for, students, faculty, and staff.**

Objectives:

In support of **Standard One**, the program:

- 1.1 Adheres to high ethical standards in relation to students, faculty, and staff.
- 1.2 Provides equitable learning opportunities for all students.
- 1.3 Provides timely, appropriate, and educationally valid clinical experiences for each admitted student.
- 1.4 Limits required clinical assignments for students to not more than 10 hours per day and the total didactic and clinical involvement to not more than 40 hours per week.
- 1.5 Assures the security and confidentiality of student records, instructional materials, and other appropriate program materials.
- 1.6 Has a grievance procedure that is readily accessible, fair, and equitably applied.
- 1.7 Assures that students are made aware of the **JRCERT Standards for an Accredited Educational Program in Radiography** and the avenue to pursue allegations of non-compliance with the **STANDARDS**.
- 1.8 Has publications that accurately reflect the program's policies, procedures, and offerings.
- 1.9 Makes available to students, faculty, and the general public accurate information about admission policies, tuition and fees, refund policies, academic calendars, academic policies, clinical obligations, grading system, graduation requirements, and the criteria for transfer credit.
- 1.10 Makes the program's mission statement, goals, and student learning outcomes readily available to students, faculty, administrators, and the general public.
- 1.11 Documents that the program engages the communities of interest for the purpose of continuous program improvement.
- 1.12 Has student recruitment and admission practices that are non-discriminatory with respect to any legally protected status such as race, color, religion, gender, age, disability, national origin, and any other protected class.
- 1.13 Has student recruitment and admission practices that are consistent with published policies of the sponsoring institution and the program.

- 1.14 Has program faculty recruitment and employment practices that are non-discriminatory with respect to any legally protected status such as race, color, religion, gender, age, disability, national origin, and any other protected class.
- 1.15 Has procedures for maintaining the integrity of distance education courses.

Standard Two:
Resources

Standard Two: **The program has sufficient resources to support the quality and effectiveness of the educational process.**

Objectives:

In support of **Standard Two**, the program:

Administrative Structure

- 2.1 Has an appropriate organizational structure and sufficient administrative support to achieve the program's mission.
- 2.2 Provides an adequate number of faculty to meet all educational, program, administrative, and accreditation requirements.
- 2.3 Provides faculty with opportunities for continued professional development.
- 2.4 Provides clerical support services, as needed, to meet all educational, program, and administrative requirements.

Learning Resources/Services

- 2.5 Assures JRCERT recognition of all clinical education settings.
- 2.6 Provides classrooms, laboratories, and administrative and faculty offices to facilitate the achievement of the program's mission.
- 2.7 Reviews and maintains program learning resources to assure the achievement of student learning.
- 2.8 Provides access to student services in support of student learning.

Fiscal Support

- 2.9 Has sufficient ongoing financial resources to support the program's mission.
- 2.10 For those institutions and programs for which the JRCERT serves as a gatekeeper for Title IV financial aid, maintains compliance with United States Department of Education (USDE) policies and procedures.

Standard Three
Curriculum and Academic Practices

Standard Three: The program’s curriculum and academic practices prepare students for professional practice.

Objectives:

In support of **Standard Three**, the program:

- 3.1 Has a program mission statement that defines its purpose and scope and is periodically reevaluated.
- 3.2 Provides a well-structured, competency-based curriculum that prepares students to practice in the professional discipline.
- 3.3 Provides learning opportunities in current and developing imaging and/or therapeutic technologies.
- 3.4 Assures an appropriate relationship between program length and the subject matter taught for the terminal award offered.
- 3.5 Measures the length of all didactic and clinical courses in clock hours or credit hours.
- 3.6 Maintains a master plan of education.
- 3.7 Provides timely and supportive academic, behavioral, and clinical advisement to students enrolled in the program.
- 3.8 Documents that the responsibilities of faculty and clinical staff are delineated and performed.
- 3.9 Evaluates program faculty and clinical instructor performance regularly to assure instructional responsibilities are performed.

Standard Four
Health and Safety

Standard Four: **The program's policies and procedures promote the health, safety, and optimal use of radiation for students, patients, and the general public.**

Objectives:

In support of **Standard Four**, the program:

- 4.1 Assures the radiation safety of students through the implementation of published policies and procedures that are in compliance with Nuclear Regulatory Commission regulations and state laws as applicable.
- 4.2 Has a published pregnancy policy that is consistent with applicable federal regulations and state laws, made known to accepted and enrolled female students, and contains the following elements:
 - Written notice of voluntary declaration,
 - Option for student continuance in the program without modification, and
 - Option for written withdrawal of declaration.
- 4.3 Assures that students employ proper radiation safety practices.
- 4.4 Assures that medical imaging procedures are performed under the direct supervision of a qualified radiographer until a student achieves competency.
- 4.5 Assures that medical imaging procedures are performed under the indirect supervision of a qualified radiographer after a student achieves competency.
- 4.6 Assures that students are directly supervised by a qualified radiographer when repeating unsatisfactory images.
- 4.7 Assures sponsoring institution's policies safeguard the health and safety of students.
- 4.8 Assures that students are oriented to clinical education setting policies and procedures in regard to health and safety.

Standard Five

Assessment

Standard Five: **The program develops and implements a system of planning and evaluation of student learning and program effectiveness outcomes in support of its mission.**

Objectives:

In support of **Standard Five**, the program:

Student Learning

- 5.1 Develops an assessment plan that, at a minimum, measures the program's student learning outcomes in relation to the following goals: clinical competence, critical thinking, professionalism, and communication skills.

Program Effectiveness

- 5.2 Documents the following program effectiveness data:
- Five-year average credentialing examination pass rate of not less than 75 percent at first Attempt within six months of graduation,
 - Five-year average job placement rate of not less than 75 percent within twelve months of graduation,
 - Program completion rate,
 - Graduate satisfaction, and
 - Employer satisfaction.
- 5.3 Makes available to the general public program effectiveness data (credentialing examination pass rate, job placement rate, and program completion rate) on an annual basis.

Analysis and Actions

- 5.4 Analyzes and shares student learning outcome data and program effectiveness data to foster continuous program improvement.
- 5.5 Periodically evaluates its assessment plan to assure continuous program improvement.

Standard Six

Institutional/Programmatic Data

Standard Six: **The program complies with JRCERT policies, procedures, and STANDARDS to achieve and maintain specialized accreditation.**

Objectives:

In support of **Standard Six**, the program:

Sponsoring Institution

- 6.1 Documents the continuing institutional accreditation of the sponsoring institution.
- 6.2 Documents that the program's energized laboratories are in compliance with applicable state and/or federal radiation safety laws.

Personnel

- 6.3 Documents that all faculty and staff possess academic and professional qualifications appropriate for their assignments.

Clinical Education Settings

- 6.4 Establishes and maintains affiliation agreements with clinical education settings.
- 6.5 Documents that clinical education settings are in compliance with applicable state and/or federal radiation safety laws.

Program Sponsorship, Substantive Changes, and Notification of Program Officials

- 6.6 Complies with requirements to achieve and maintain JRCERT accreditation.

Awarding, Maintaining, and Administering Accreditation

A. Program/Sponsoring Institution Responsibilities

1. Applying for Accreditation

The accreditation review process conducted by the Joint Review Committee on Education in Radiologic Technology (JRCERT) can be initiated only at the written request of the chief executive officer or an officially designated representative of the sponsoring institution.

This process is initiated by submitting an application and self-study report, prepared according to JRCERT guidelines, to:

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

2. Administrative Requirements for Maintaining Accreditation

- a. Submitting the self-study report or a required progress report within a reasonable period of time, as determined by the JRCERT.
- b. Agreeing to a reasonable site visit date before the end of the period for which accreditation was awarded.
- c. Informing the JRCERT, within a reasonable period of time, of changes in the institutional or program officials, program director, clinical coordinator, full-time didactic faculty, and clinical instructor(s).
- d. Paying JRCERT fees within a reasonable period of time.
- e. Returning, by the established deadline, a completed Annual Report.
- f. Returning, by the established deadline, any other information requested by the JRCERT.

Programs are required to comply with these and other administrative requirements for maintaining accreditation. Additional information on policies and procedures is available at www.jrcert.org.

Program failure to meet administrative requirements for maintaining accreditation will lead to being placed on Administrative Probationary Accreditation and result in Withdrawal of Accreditation.

B. JRCERT Responsibilities

1. Administering the Accreditation Review Process

The JRCERT reviews educational programs to assess compliance with the **Standards for an Accredited Educational Program in Radiography**.

The accreditation process includes a site visit.

Before the JRCERT takes accreditation action, the program being reviewed must respond to the report of findings.

The JRCERT is responsible for recognition of clinical education settings.

2. Accreditation Actions

JRCERT accreditation actions for Probation may be reconsidered following the established procedure.

JRCERT accreditation actions for Accreditation Withheld or Accreditation Withdrawn may be appealed following the established procedure. Procedures for appeal are available at www.jrcert.org.

All other JRCERT accreditation actions are final.

A program or sponsoring institution may, at any time prior to the final accreditation action, withdraw its request for initial or continuing accreditation.

Educators may wish to contact the following organizations for additional information and materials:

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

Section 9

Program Goals and Assessment

Program Assessment Goals

Goal 1. Students/graduates will exhibit effective communication skills.

Student Learning Outcomes: Students will practice written communication skills.
Students will practice oral communications skills in the clinical area.
Students will practice oral communications skills in a group/class setting.

Goal 2. Students/graduates will be clinically competent for entry-level performance.

Student Learning Outcomes: Students will utilize skills in equipment manipulation and patient positioning.
Students will select proper technical factors.
Students will practice radiation protection skills.

Goal 3. Students/graduates will exhibit effective critical thinking, and problem solving skills.

Student Learning Outcomes: Students will complete case studies in critical thinking and problem solving.
Students will perform critical thinking and problem solving Skills in clinical assignments.

Goal 4. Students/graduates will exhibit development of professional growth in attitudes, behavior, and ethics.

Student Learning Outcomes: Students will exhibit a professional attitude in clinical Assignments.
Students will demonstrate the value of professional growth and Development.
Students will demonstrate the importance of work ethics.

Program Effectiveness Data:

1. Students will pass the ARRT Certification on 1st attempt.
2. Students will complete program within 24 months.
3. Employers will be satisfied with graduates' performance.
4. Graduates will be satisfied with their education.
5. Students pursuing employment will be employed within 12 months post-graduation.

Outcomes Assessment Plan

Columbus Technical College Radiologic Technology Program

Goal 1: Students/graduates will exhibit effective communication skills

Outcome	Measurement Tool	Benchmark	Timeframe	Responsible Party
Students/graduates will practice written communication skills.	Scientific research paper. Rubric grading	Score at least a 40 on a 50 point scale.	2 nd year Spring Semester	Program Director
Students/graduates will practice oral communication skills in the clinical area.	Weekly evaluations Question # 2 3 random evaluations on all students.	Score 3 or above on a scale of 1-4	1 st year Summer Semester	Clinical Instructor Clinical Coordinator
Students/graduates will practice oral communication skills in a group/class setting	Orthopedic Case Study presentation Rubric Evaluation	Score 21 or higher on a 28 point scale	2 nd year Spring Semester	Clinical Coordinator
	Legal Case Study group presentation (2-3 students in a group) Rubric Evaluation	Score 18 or higher on a 24 point scale	1 st year Fall Semester	Program Director

Goal 2: Students/graduates will be clinically competent for entry-level performance.

Outcome	Measurement Tool	Benchmark	Timeframe	Responsible Party
Students/graduates will utilize skills in equipment manipulation and patient positioning.	Weekly clinical evaluations – Question 4 & 7 3 random samples of each student.	Average score of 3 or higher on a 4 point scale	1 st year Summer Semester	Clinical Instructors
	Returned Employer Survey – question # 4	100% will say Meets Expectation (scale = Exceed, Meets, Below)	5-6 months after graduation Spring semester	Program Director
Students/graduates will select proper technical factors.	Proficiency Evaluations. 3 random samples from all students.	Average score of 1.5 on a 3 point scale of 0-2	2 nd year Spring Semester	Clinical Instructors
	Returned Employer Survey – Question # 5	100% will say Meets Expectation (scale = Exceed, Meets, Below)	5-6 months after graduation Spring Semester	Program Director
Students/graduates will practice radiation protections skills.	Weekly clinical evaluations – Question 11 3 random samples from all students.	Average score of 3 or higher on a 4 point scale	1 st year Spring or Summer Semester	Clinical Instructors
	Returned Employer Survey – Question 2	100% will say Meets Expectation or above (scale = Exceed, Meets, Below)	5-6 months after graduation Spring semester	Program Director

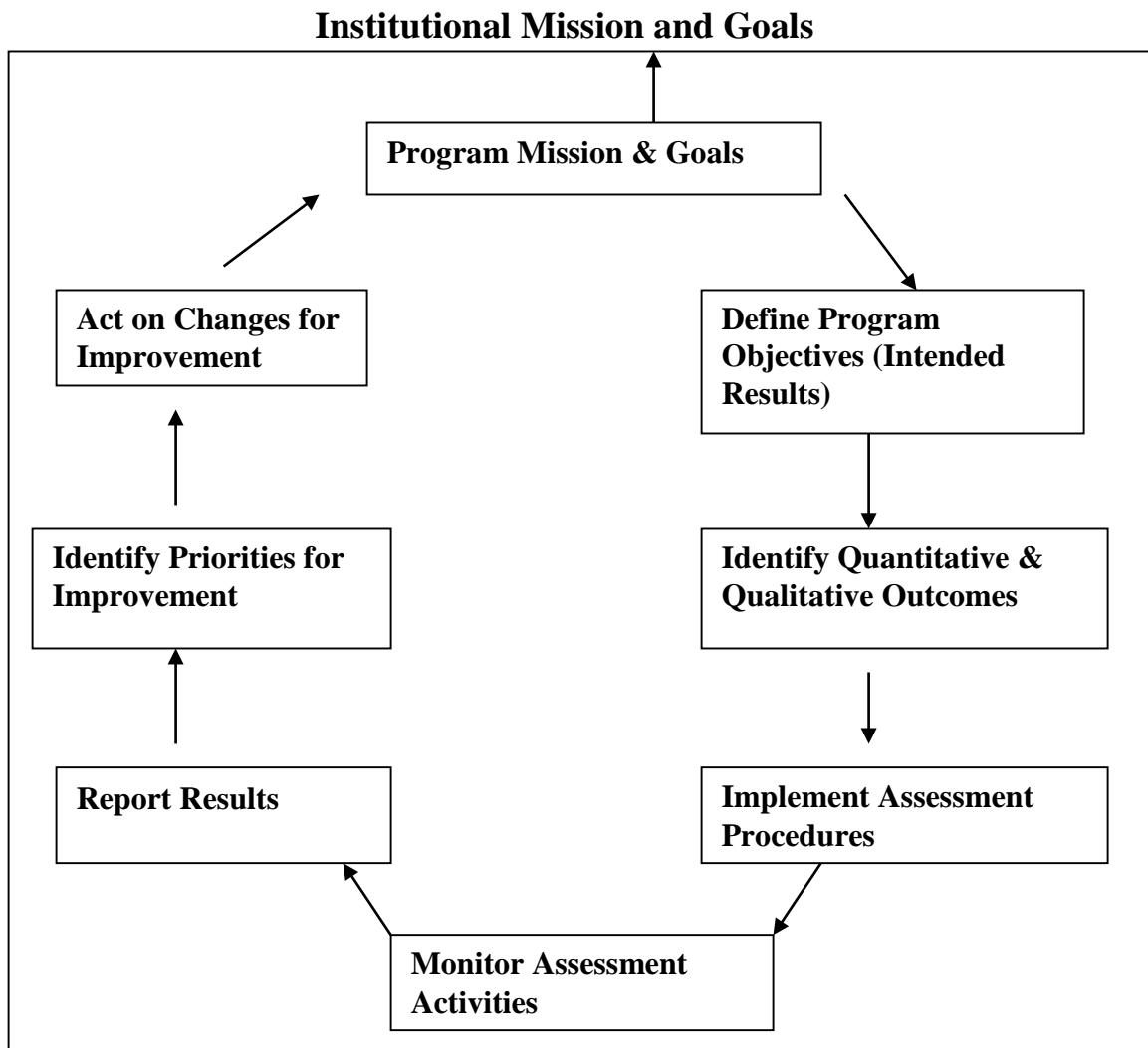
Goal 3: Students/graduates will exhibit effective critical thinking, and problem solving skills.

Outcome	Measurement Tool	Benchmark	Timeframe	Responsible Party
Students/graduates will complete case studies in critical thinking and problem solving.	Submitted Case Studies from all students	Score 80% or higher	1 st year Spring Semester 2 nd year Spring Semester	Clinical Coordinator
Students/graduates will perform critical thinking and problem solving skills in clinical assignments.	Proficiency Evaluation Section II – Film critique 3 Random samples from all students	Score 1.5 or above on a scale of 0-2	2 nd year Fall Semester	Clinical Instructors
	Trauma Exam Proficiency. All students will complete 3 per semester	Score of 80 or higher	2 nd year Fall and Spring Semesters	Clinical Instructors Clinical Coordinator
	Returned Employer Surveys Question # 9	100% will say Meets Expectation or above (scale = Exceed, Meets, Below)	5-6 months after graduation Spring semester	Program Director
	Returned Graduate Surveys Section IV Question # 4 and 5	100% will rate 2 (Good) or above on a 3 point scale	5-6 months after graduation Spring semester	Program Director

Goal 4: Students/graduates will exhibit development of professional growth in attitudes, behavior, and ethics.

Outcome	Measurement Tool	Benchmark	Timeframe	Responsible Party
Students/graduates will exhibit a professional attitude in clinical assignments.	Weekly evaluations Question # 5 & 6 3 random samples from all students.	Average score of 3 or higher on a 4 point scale	1 st year Summer Semester	Clinical Instructors Clinical Coordinator
	Returned Employer Surveys Question # 11	100% will say Meets Expectation or above (scale = Exceed, Meets, Below)	5-6 months after graduation Spring semester	Program Director
Students/graduates will demonstrate the value of professional growth and development.	Paper on importance of professional organizations and being a member of the radiology society. Rubric Grading	Score at least 40 points on and 50 point scale	1 st year Fall semester	Program Director
	Returned Graduate Surveys Section IV – Questions 3 & 6	90% will say Yes	5-6 months after graduation Spring semester	Program Director
Students/graduates will demonstrate the importance of work ethics	Work Ethics grade in capstone course Average of all students	Score 80% or higher	2nd year Summer Semester	Course Instructor
	Employability grade Of all students	80% or above	1 st year Summer semester 2 nd year Summer Semester	Clinical Coordinator

CYCLE OF ASSESSMENT



Section 10

Clinical Education Master Plan

COLUMBUS TECHNICAL COLLEGE
School of Radiologic Technology
928 Manchester Expressway
Columbus, Georgia 31904-6572

HOURS OF CLINICAL SUPERVISION

Each staff member of this program allots a certain amount of time to clinical supervision of students. The following is a general listing of such times:

Martha Dollar, MPA, R.T., (R)	Visits various clinical sites Monday thru Thursday when needed.
Kimberly Whitaker, MSM, R.T., (R)	Monday thru Thursday to all sites weekly and as needed
Clinical Affiliate Instructors	Monday thru Saturday during assigned hours.

Clinical Courses

RADT 1320- CLINICAL RADIOGRAPHY I

Introduces students to the hospital clinical setting and provides an opportunity for students to participate in or observe radiographic procedures. Topics include: orientation to hospital areas and procedures; orientation to mobile/surgery; orientation to radiography and fluoroscopy; participation in and/or observation of procedures related to body cavities, the shoulder girdle, and upper extremities. Activities of students are under direct supervision.

RADT 1330- CLINICAL RADIOGRAPHY II

Continues introductory student learning experiences in the hospital setting. Topics include: equipment utilization; exposure techniques; attend to and/or observation of routine projections of the lower extremities, pelvic girdle, and spine; attend to and/or observation of procedures related to the gastrointestinal (GI), genitourinary (GU), and biliary systems; and attend to and/or observation of procedure related to minor radiologic procedures. Execution of radiographic procedures will be conducted under direct and indirect supervision.

RADT 2340- CLINICAL RADIOGRAPHY III

Provides students with continued hospital setting work experience. Students continue to develop proficiency in executing procedures introduced in Radiographic Procedures. Topics include: patient care; behavioral and social competencies; performance and/or observation of minor special procedures, special equipment use, and participation in and/or observation of cranial and facial radiography. Execution of radiographic procedures will be conducted under direct and indirect supervision.

RADT 2360- CLINICAL RADIOGRAPHY IV

Provides students with continued hospital setting work experience. Students demonstrate increased proficiency levels in skills introduced in all of the radiographic procedures courses and practiced in previous clinical radiography courses. Topics include: patient care; behavioral and social competency; advanced radiographic anatomy; equipment utilization; exposure techniques; sterile techniques; integration of procedures and/or observation of angiographic, interventional, minor special procedures; integration of procedures and/or observation of special equipment use; integration of procedures and/or observation of routine and special radiographic procedures; and final completion of all required clinical competencies. Execution of radiographic procedures will be conducted under direct and indirect supervision.

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STATEMENT:

The Director and Faculty of the program recognize the Standards for an Accredited Education Program in Radiologic Sciences of the Joint Review Committee on Education in Radiologic Technology as a guide in establishing the Clinical Education Master Plan of Columbus Technical College School of Radiologic Technology.

OBJECTIVES:

To provide a balanced education in a quantity and variety of radiographic examinations and equipment

To establish a standardized system to schedule, evaluate, and document the students' progress and proficiency.

SCHEDULE OF ROTATIONS

The Standards for an Accredited Education Program in Radiologic Sciences adopted by the Joint Review Committee on Education in Radiologic Technology (JRCERT) states that the clinical education setting to include all clinical affiliations for the Program:

- Be recognized by the JRCERT
- Provides the clinical staff in radiography with the ration of students and staff prior to student competency achievement in a given examination or procedure shall no exceed 1:1
- Supports the mission and goals
- Supports the educational process
- Supports the student attainment of program learning outcomes
- Supports the number of enrolled students
- Provides students with a variety and volume of procedures (numbers and types of) for competency achievement.
- Assures that the clinical staff understands the clinical competency system.

1. Scheduling

The following page is a sample schedule of planned assignments for clinical education. In each of the clinical assignments, a Registered Radiographer is required to be present for direct supervision during all radiographic examinations.

The clinical schedule is planned in conjunction with the didactic portion of the program. The proficiency program is also planned in accordance with the clinical schedule so that students will be able to observe exams being instructed one semester and begin performing those exams for competency the following semester. The requirements of the proficiency program are outlined in Section 3.

**RADT 1320 Clinical Radiography I Example
Spring Semester**

Clinical Time: 7:30-12:00

Clinical Assignment	3-31	4-7	4-14	4-21	4-28	5-5	5-12	5-19
TMC Gen A	Wendy	Lauren	Sharon	Stephanie	Chan	Hunter	Tony	Jason
TMC Desk/Transport A	Laura	Wendy	Lauren	Sharon	Stephanie	Chan	Hunter	Tony
TMC ER B	Karen	Laura	Wendy	Lauren	Sharon	Stephanie	Chan	Hunter
TMC 3 A	Elizabeth	Karen	Laura	Wendy	Lauren	Sharon	Stephanie	Chan
Horizons	Mac	Elizabeth	Karen	Laura	Wendy	Lauren	Sharon	Stephanie
TMC Port B	Ashley	Mac	Elizabeth	Karen	Laura	Wendy	Lauren	Sharon
Jack Hughston B	Stepheny	Ashley	Mac	Elizabeth	Karen	Laura	Wendy	Lauren
TMC Afternoon B	Stacy	Stepheny	Ashley	Mac	Elizabeth	Karen	Laura	Wendy
TMC IVP A	Jason	Stacy	Stepheny	Ashley	Mac	Elizabeth	Karen	Laura
TMC 1 A	Tony	Jason	Stacy	Stepheny	Ashley	Mac	Elizabeth	Karen
St. Francis Hosp	Hunter	Tony	Jason	Stacy	Stepheny	Ashley	Mac	Elizabeth
TMC OR A	Chan	Hunter	Tony	Jason	Stacy	Stepheny	Ashley	Mac
TMC Afternoon* B	Stephanie	Chan	Hunter	Tony	Jason	Stacy	Stepheny	Ashley
ST Francis Hosp	Sharon	Stephanie	Chan	Hunter	Tony	Jason	Stacy	Stepheny
TMC 2 A	Lauren	Sharon	Stephanie	Chan	Hunter	Tony	Jason	Stacy

***Afternoon student hours: Mon and Wed 4:00 – 7:00; Tues, Thurs, Fri. 1:30-7:00. If you have SPC 191 on M & W your hours for M & W will be 9:00AM – 12:00.**

***Lab for RAD 106 Procedures is on Wednesday:**

Group A = 12:30

Group B = 2:00

Holiday: May 26 - Memorial Day

This schedule allows the student to complete the quantity of radiographic exams in accordance with the JRCERT Standards. In each of the following clinical assignments, a Registered Radiographer shall be on the premises in the vicinity of the radiographic area and available for immediate assistance to the student, once the student has been deemed proficient in exams performed in those areas. Specialty areas, such as Radiation Therapy, Phlebotomy, and Cardiac Cath Lab are also scheduled to provide the opportunity to observe and expand the knowledge of the student.

Below is a sample schedule of planned assignments of students in the last semester of the program..

**RADT 2360 Clinical Radiology Example- 6 weeks of 15 week semester
Spring Semester**

Clinical Assignment	Mon	Tues	Wed	Thru	Fri	Sat	7-9	7-16	7-23	7-30	8-6	8-13
TMC Rad Therapy **	7:30-3:00	7:30-12:00	7:30-3:00	7:30-12:00	7:30-12:00		Ashley	AJ	Sandy	Ellen	Teresa	Nancy
TMC – Phlebotomy	7:30-3:00	7:30-12:00	7:30-3:00	7:30-12:00	7:30-3:00		Tessa	Ashley	AJ	Sandy	Ellen	Teresa
TMC Afternoon	1:00-7:00	4:00-7:00	1:00-7:00	4:00-7:00	1:00-7:00		Larry	Tessa	Ashley	AJ	Sandy	Ellen
TMC CT	7:30-3:00	7:30-12:00	7:30-3:00	7:30-12:00	7:30-3:00		Allicia	Larry	Tessa	Ashley	AJ	Sandy
SF Ortho	7:30-3:00	7:30-12:00	7:30-3:00	7:30-12:00	7:30-3:00		Ron	Allicia	Larry	Tessa	Ashley	AJ
HSMH 1&2	7:30-3:00	7:30-12:00	7:30-3:00	7:30-12:00	7:30-3:00		Chris	Ron	Allicia	Larry	Tessa	Ashley
TMC 2	7:30-3:00	7:30-12:00	7:30-3:00	7:30-12:00	7:30-3:00		Lindsay	Chris	Ron	Allicia	Larry	Tessa
Cardiac Cath Lab SF **	7:30-3:00	7:30-12:00	7:30-3:00	7:30-12:00	Off	7:30-3:00	Nancy	Lindsay	Chris	Ron	Allicia	Larry
TMC OR	7:30-3:00	7:30-12:00	7:30-3:00	7:30-12:00	7:30-3:00		Teresa	Nancy	Lindsay	Chris	Ron	Allicia
Jack Hughston	7:30-3:00	7:30-12:00	7:30-3:00	7:30-12:00	7:30-3:00		Ellen	Teresa	Nancy	Lindsay	Chris	Ron
St. Francis Hospital	7:30-3:00	7:30-12:00	7:30-3:00	7:30-12:00	7:30-3:00		Sandy	Ellen	Teresa	Nancy	Lindsay	Chris
Northside OR	7:30-3:00	7:30-12:00	7:30-3:00	7:30-12:00	7:30-3:00		AJ	Sandy	Ellen	Teresa	Nancy	Lindsay

Holiday: Memorial Day, May 31st

SPECIALTY AND ELECTIVE CLINICAL ASSIGNMENTS

Students are assigned to special imaging modalities and other radiology related areas on a limited basis. This is done as a means of providing the students an opportunity to observe, assist and broaden their knowledge of the ever-expanding field of Radiologic Technology.

Special Imaging Modalities include Computerized Tomography, Ultrasound, Nuclear Medicine, Magnetic Resonance Imaging, Cardiology, and Radiation Therapy. In accordance with the *Standards for an Accredited Educational Program in Radiologic Sciences*:

- “Student awareness and experience in state of the art imaging modalities should be assured.”
- Opportunities for elective rotations may be provided in areas such as specialized imaging, radiation oncology, nuclear medicine, and medical ultrasound.”

As with all other radiographic assignments, performance objectives are written for each of these areas and students are evaluated on their cognitive, psychomotor and affective behaviors in each of those assignments as they observe and assist in these specialty areas.

Students are also required to be under the direct supervision of qualified staff personnel while in their assigned areas.

By allowing a student to rotate through these specialty areas, the program may assist students in determining their desire to enter such areas in the future and thereby begin the process of applying to other specialty schools.

Rotations in each of these areas are permitted for one week at some point in training. One week of “elective” rotation may be permitted during the student’s last semester of enrollment. The student is asked to notify the Program Director of his/her choice for special rotation, keeping in mind their job placement upon graduation. The Clinical Coordinator will then inform each specialty area when a student will begin rotating through the area. Evaluation of the student’s performance will take place at the end of the week. These evaluations are graded in the same way as all other evaluations. Grades are recorded and the student then reviews the evaluation forms and returns them to the faculty.

CLINICAL INSERVICE GRAND ROUNDS – 1ST YEAR
(Part of lab activities for RADT 1010)

PURPOSE: To integrate the didactic and clinical divisions of the Program.
To instruct on site the equipment operation and set-up procedures for appropriate exams.

COORDINATED BY: Program Director & Clinical Coordinator

INSTRUCTORS: Faculty members, Registered Staff Radiographers, Guest Instructors as appropriate.

PLACE: Radiology Department at Midtown Medical Center

TIME: First Semester for new students.

TOPICS OF PRESENTATIONS:

1. General Hospital Tour
2. Radiology Department Tour
3. Patient Care Moving/Transport
4. Surgical Suite Orientation
5. Equipment Orientation
6. Image Processing
7. Processor operation/Digital processing
8. Film filing/record keeping
9. Film Quality/evaluation-multiple sessions
10. Fluoroscopy room set-up
11. Equipment/attire radiation protection
12. Trauma Radiology
13. Visit Clinical Affiliates for tour at appropriate time

The following sessions are a part of Radiographic Procedures classes:

1. Film quality/evaluation – multiple sessions on this topic
2. Operation of C-arm/mobile fluoro equipment
3. CT and MRI
4. Angiography Suite
5. Cardiology
6. Pathology Department
7. Automatic Exposure Control
8. Radiation Therapy
9. Quality Assurance

II. CLINICAL OBJECTIVES & EVALUATIONS

CLINICAL EDUCATION

PURPOSE:

The purpose of this outlined program for clinical education is to provide guidelines for students and those technologists involved in the development of clinical competence.

INTRODUCTION:

Students must have adequate and proper supervision during all clinical assignments. In the Radiologic Technology Program, students must be under Direct Supervision which is defined as: Student supervision by a qualified practitioner 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 present during the procedure and reviews and approves the procedure. A qualified radiographer is present during student performance of a repeat of any unsatisfactory radiograph.

In the Radiographic Technology Program, once the student has been deemed competent in the procedures they wish to challenge, the student can be under Indirect Supervision which is defined as: Supervision provided by a qualified practitioner immediately available to assist student. Immediately available is interpreted as the physical presence of a qualified practitioner 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.

Repeat radiographs are performed while the registered radiographer is present with a student of either level. Behavioral objectives are presented for better understanding of cognitive, affective, and psychomotor skills to be integrated.

LEVELS: Student Under Direct Supervision

The stated clinical objectives shall be achieved with a minimum of 85% success (in each type of radiographic facility) after the student has been checked off in Lab for the specific procedure.

The first two semesters of the clinical proficiency program consist of specified exams to be accomplished by the student. These exams are considered standard or routine. Also included is a pediatric category.

The remaining semesters of the proficiency program consist of “categories” of exams to be fulfilled accordingly and include more specialized procedures in radiography as well as the Pediatric category.

Student Under Indirect Supervision

Once the student has been deemed competent, the student may perform those procedures under Indirect Supervision where the assigned radiographer can be in close proximity to the room where the procedure is being performed, so as to be quickly available should there be a need by the student. All images must be approved by the radiographer before the patient can leave the exam room. No student can approve any image that is sent to the radiologist.

GRADING:

First year – first semester – Students will be evaluated by the assigned radiographer each week. (See Clinical Evaluation below). This evaluation serves to indicate the entry-level of student ability to observe, inquire, aid the patient and RT, develop basic professionalism, and to learn departmental procedures, performing exams they have performed in Lab and have been graded on with an 85% or higher.

The Director's Reports is completed by the faculty and serves to evaluate the student's professional attitude, self-image, punctuality/attendance, and appearance/dress code adherence.

Clinical Proficiencies are scheduled each semester for completed by the student. Students are required to complete the specified number of proficiencies each semester as indicated on the Semester List. Upon receipt of completed Weekly, Director's, and Progress evaluations, the faculty review, grade, record and distribute them to the students. Counseling and/or conferences are held as deemed necessary.

RADIOGRAPHY CLINICAL EDUCATION GRADING:

AFFECTIVE PERFORMANCE EVALUATION is an assessment of the affective domain. The clinical weekly evaluations are completed weekly by the assigned radiographer and/or the clinical instructor. The Director's Report is completed by the Director/Clinical Coordinator. The clinical weekly evaluation contains blocks of descriptive terms of performance areas. The Director's Report includes blocks of descriptive areas of performance. These two reports are issued to the student for their review and signature.

The student is also evaluated on their employability by starting out the semester with 100 banked points. Each absence, tardy, or other infraction leads to points being deducted from the 100 total points (see Section 3 under Employability). At the end of the semester, this section is documented as a portion of the total grade.

Each semester, the student will participate in writing assignments meant to develop his/her critical thinking skills. The first clinical semester, the student will participate in a journaling assignment and the following semesters will be assigned clinical case studies to give their input as to the appropriate resolution of the case study presented.

The weights of each of these areas are as follows:

- Clinical Weekly Evaluations = 15%
- Director's Report = 15%
- Employability = 15%
- Clinical Case Studies = 15%

APPLIED CLINICAL PROFICIENCY performance is an assessment of the cognitive and psychomotor skills. The number, requirements and forms for each semester are described and listed in the Clinical Education Master Plan. A Clinical Progress Evaluation appears on the back of the Clinical Weekly Evaluation completed by the assigned radiographer. The progress evaluation is based on written published objectives for each type of radiographic assignment. The Proficiency evaluation is a separate form completed by the registered radiographer. Students who fail to complete the required number of proficiencies during a given semester by the due date shall receive a grade based on the number of proficiencies completed. The remaining proficiencies must be completed by the end of the next semester to prevent further grade reduction.

The weight of these two components is:

- Progress Evaluations = 10%
- Clinical Proficiencies = 30%

Students must maintain an average of 80 or above in clinical courses to remain enrolled in the Program.

CLINICAL GRADING PROCESS

AFFECTIVE PERFORMANCE EVALUATION:

WEEKLY EVALUATIONS:

Total number of points:

A = 52 – 47

B = 46 – 39

C = 38 – 26

D = 25 - 21

F = 20 and below

DIRECTOR'S REPORT:

Total number of points = 16, therefore $16/16 = 100\%$. The first column = 0 points, the second column = 2 points, and the third column = 4 points. The grade is figured on percentage of points earned out of total possible. Example: $14/16 = 87.5$.

CLINICAL PROFICIENCIES:

Total number of points possible on each proficiency is 32, so when a student completes the exam, the grade is 32 or 100%. 29-32 points = A; 26 – 28 points = B, and 25 and below is a failure. If a student fails to receive at least 26 points, he/she is not proficient in that exam and must continue observation, assistance, and practice prior to a return challenge to that exam. Students should not turn in any proficiency with a grade less than a 26, which is considered an 80 (B).

Students must complete the required number of proficiencies each semester. Example: 25/25 proficiencies completed = 100%.

If all proficiencies are completed by the due date, the student receives a 100 for the semester. This counts as 30% of the student's final grade. If the student does not complete all required proficiency, his/her grade is based on the number completed by the due date. Example: 23 out of 25 proficiencies completed = 92%. The remaining proficiencies not completed during the semester will be added to those required for the next semester and must be completed by the end of the following semester.



Radiologic Technology Program
Student Clinical Affective (Behavioral) Performance Evaluation

STUDENT: _____ **ISSUED FOR WEEK OF:** _____

ASSIGNED AREA _____

RATING:

0-1= Unsatisfactory--- Performance is below expectations; Action plan & follow-up are required to address performance deficiencies.

2= Needs Improvement-Performance meets some, but not all, performance expectations. Performance must be more consistent to successfully meet MINIMUM. Action plan required.

3= Satisfactory/Successful –Performance meets the minimum acceptable expectations.

4= Outstanding-Consistently maintains & exceeds performance expectations. Results MEET or exceed expectations and represents top performance as compared to student peers performance.

AFFECTIVE PERFORMANCE CRITERIA	RATING	SUGGESTIONS/COMMENTS
1. <u>PATIENT CARE</u> -communicating with, assistance skills; comfort & care.		
2. COMMUNICATION ;- With staff & Physicians; cooperates; listens & carries out request		
3. PERFORMANCE- QUANTITY & QUALITY DURING ASSIGNMENT ; Initiative and Motivation		
4. OBSERVANCE & ATTENTIVENESS during procedures; actively participating		
5. PROFESSIONAL COMPOSURE , adaptability; self-control; Professional ethics		
6. ATTITUDE : toward clinical tasks, interest; Constructive criticism & instructions.		
7. UTILIZATION SKILLS ; equipment & supplies; inc. manipulation & management		
8.Accuracy & completion of paperwork; stocking supplies; film processing		
9. Organizational ABILITY- performance of task, orderly flow; use of time		
10. TEAM WORK/MEMBER PERFORMANCE ;		
11. RADIATION PROTECTION SKILLS Self; patient & personnel		
12. PUNCTUALITY to assignment (all day: inc A.M. and Mealtime return)		
13. APPEARANCE - conforms to dress code; hair, nails, earrings, clean uniform and shoes		

RADIOGRAPHER: _____ **DATE** _____



**Radiologic Technology Program
Director's Report of Student Clinical Affective Performance**

STUDENT _____ **WEEK** _____ **ASSIGNMENT** _____

<u>Professional Attitude :</u> Rude, unethical, Unprofessional Immature, Unacceptable	-Acceptable AND needs immediate improvement -Needs refinement of professional behavior	-Mature and Professional -Reflects standards and behavioral traits instructed
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COMMENTS:

<u>Self-Image:</u> -Negative behavioral traits -Lacks confidence or is overly confident -Exhibits inability to take on responsibility and/or make decisions	-Needs improvement -Exhibits some lack of self confidence -Self conscious	-Confident, shows pride through behavior & actions reflect good self-image -Pleasant disposition exhibited
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COMMENTS:

<u>Punctuality/Attendance:</u> -Tardy (2 or more X's per week) -Multiple absences -Over due time card - LOST TIME CARD - *FAILURE TO REPORT ABSENCE PROPERLY - *LEAVING EARLY WITHOUT PROPER PERMISSION *Constitutes disciplinary action	-Failure to clock in/out properly -Damaged time card(1 st time) -Past due submitting time card (1st time/semester) - Time card written on = counts as a tardy -Tardy/Absent 1 time this week (3 tardies = 1 absence = 1make up day)	Excellent: -no absence -no tardy -Reports to assigned area on time -clocking properly -time card on time
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COMMENTS:

<u>Appearance/Dress Code:</u> -Unacceptable DOES NOT meet dress code; - DAMAGED or LOST Film Badge	-Appearance REQUIRES IMMEDIATE improvement; -Area(s) of dress code NOT MET; -Film Badge not worn properly.	Excellent: neat, clean, professional, meets ALL of the dress code; Film Badge is worn properly.
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COMMENTS:

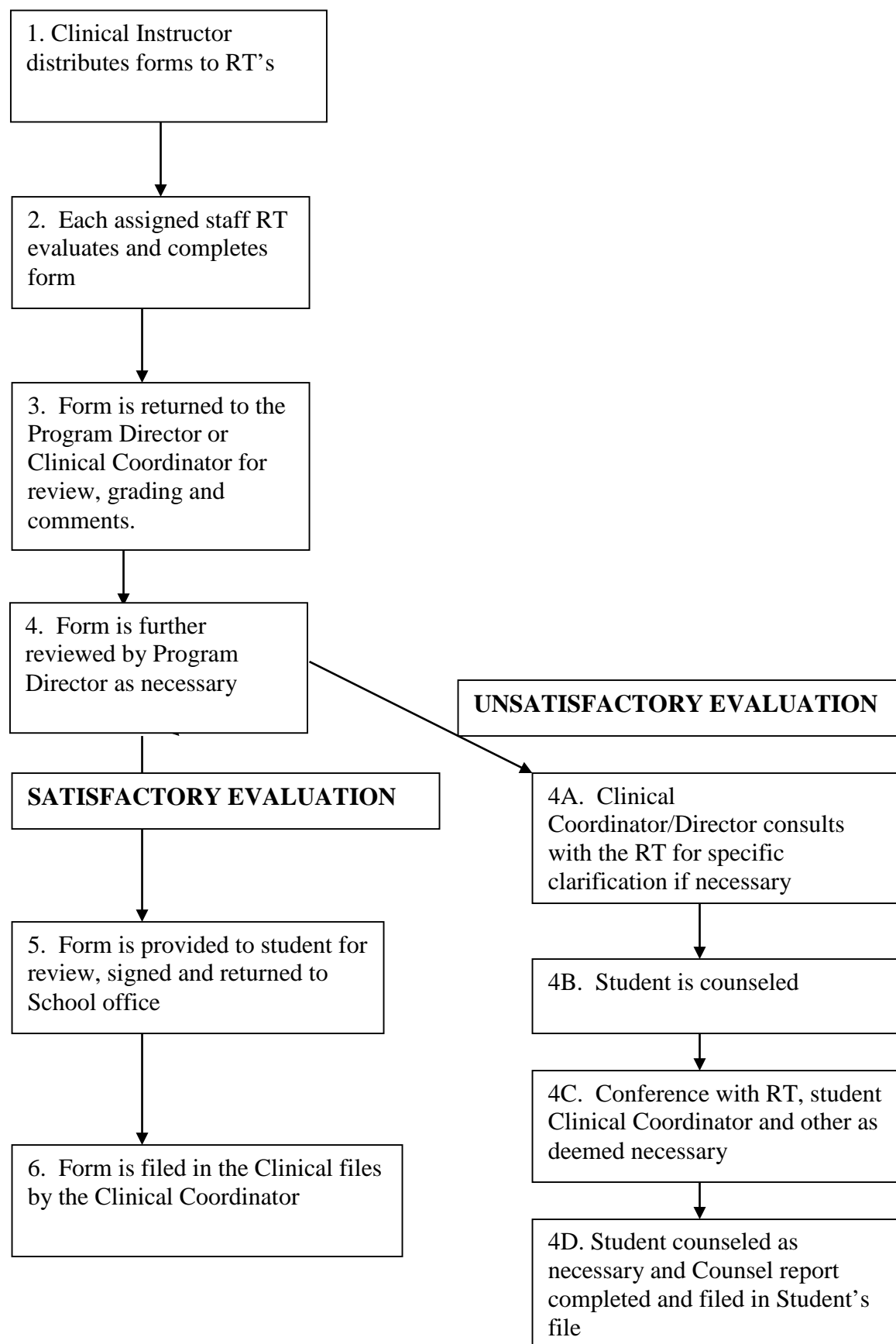
Clinical Coordinator's/Director's Signature

Signature _____ Date _____

Student's

Signature _____ Date _____

CLINICAL EVALUATION PROCESS AND PROBLEM SOLVING PROCEDURE



GENERAL RADIOGRAPHY
OBJECTIVES FOR PSYCHOMOTOR SKILLS PROGRESSS

Upon instruction by qualified radiographer and completion of the rotation in a general radiographic room, the student should be able to:

1. Understand/Perform x-ray tube warm-up procedures during the majority of this assignment.
2. Select and use appropriate equipment accessories (grids, etc.).
3. Set up room and manipulate equipment (tomographic unit, when applicable).
4. Position patients for general radiographic procedures according to department standards.
5. Prepare contrast media when needed.
6. Select or set proper technical factors for routine examinations (MA, time, KVP, and SID).
7. Select adjustments in technique for unusual cases.
8. Practice radiation protection for self, patients, and others.
9. Maintain cleanliness of room, equipment, dressing areas, and adjoining restroom.
10. Utilize basic nursing care and first-aid.
11. Practice satisfactory customer service skills, communication, proper medical ethics, and professionalism.
12. Complete departmental paperwork as required.
13. Process films/images and reloads cassettes as required.
14. Identify anatomy on finished radiograph.
15. Performs as a TEAM MEMBER and remains in the assignment with the assigned radiographer.



GENERAL RADIOGRAPHY

APPLIED CLINICAL PSYCHOMOTOR SKILLS PROGRESS EVALUATION

Consider the following to evaluate the progression of student psychomotor skills and activities:

First Year is under Direct Supervision and Instruction of Radiographer:

3-9 months – Observation, interacting, participating/performing

0-12 months – Interacting and participating/performing

Second Year is under Instruction and Indirect supervision of Radiographer:

12-24 months – Active participation/performance

BASED ON THE ABOVE, DOES THIS STUDENT:	SAT	UNSAT
1. Understands/performs warm-up procedures during majority of this assignment.		
2. Select and use correct accessories/devices		
3. Set up room and equipment (including tomography unit if applicable)		
4. Position patient for general radiographic procedures		
5. Prepare contrast media when needed		
6. Select or set proper technical factors		
7. Make adjustments in technique for unusual cases		
8. Practice radiation protection for self, patient and others		
9. Maintain cleanliness of room, equipment, dressing room and restroom		
10. Use basic nursing care and first aid when needed		
11. Practice SATISFACTORY customer service skills, communication, proper medical ethics and professionalism		
12. Complete departmental paperwork		
13. Process films/images and reload cassettes		
14. Identify anatomy on finished radiographs		
15. Performs as a Team Member and remained in the assignment with the assigned radiographer		
TOTALS:		

In what way(s) did you assist the student to make improvements this week?

What areas did you have to advise the student of during this assignment?

What further recommendations would you suggest for this student?

EVALUATOR: _____ Date: _____

FLUOROSCOPY

OBJECTIVES FOR PSYCHOMOTOR SKILLS PROGRESS

Upon instruction by a qualified radiographer and completion of the rotation in Fluoroscopy, the student will be able to:

1. Understand/perform or assist in the tube warm up procedure.
2. Select and use correct accessories.
3. Manipulate equipment using locks, releases on tube, table and Bucky.
4. Set up and operate TV monitor, spot film device, photo camera, image intensifier, and/or digital equipment during radiographic/fluoroscopic procedures.
5. Set up C-arm properly for selected studies.
6. Set controls for general and fluoroscopy including KVP, MA, Time.
7. Make adjustment in technique for unusual cases.
8. Explain procedures for patients in a clear, understandable and professional manner.
9. Assist with positioning patients for routine radiography.
10. Assist in positioning patients for fluoroscopy/c-arm studies.
11. Prepare contrast media as needed, sterile trays and supplies.
12. Practice radiation protection for self, patient and others.
13. Utilize/provide basic nursing care as needed.
14. Practice satisfactory customer service skills, proper medical ethics and professionalism.
15. Use standard precautions in handling and disposal of contaminated materials, trays, etc.
16. Maintain cleanliness in room, restroom, dressing rooms.
17. Assist in maintaining supplies in rooms as needed.
18. Complete department paperwork
19. Process/assemble films/images for interpretation, checking identification and markers.
20. Identify projections and anatomy on finished radiograph
21. Perform as a team member and remain in the assignment with the assigned radiographer.



FLUOROSCOPY

APPLIED CLINICAL PSYCHOMOTOR SKILLS PROGRESS EVALUATION

Consider the following to evaluate the progression of student psychomotor skills and activities:

First Year is under Direct Supervision and Instruction of Radiographer:

3-9 months – Observation, interacting, participating/performing

9-12 months – Interacting and participating/performing

Second Year is under Instruction and Indirect supervision of Radiographer:

12-24 months – Active participation/performance

BASED ON THE ABOVE, DOES THIS STUDENT:	SAT	UNSAT
1. Understands/performs x-ray tube warm-up procedures during majority of this assignment.		
2. Select and use appropriate equipment accessories		
3. Manipulate equipment using locks, releases, motorized movement (tube, table, monitors)		
4. Set up and operate the TV monitor, spot film & camera devices, image intensifier.		
5. Prepare contrast media (inc. barium, air, injectables, and trays)		
6. Insert enema tips properly & control the flow of barium for enemas		
7. Set controls for fluoroscopy include changing the overhead tube, technique		
8. Set controls for radiography to include changing the overhead tube, technique		
9. Assist with positioning of patients during fluoroscopy to inc. administration of barium & air		
10. Assist in making technique adjustment for unusual cases (patient size and condition)		
11. Position patient for routine films including preliminary & post fluoro films		
12. Practices radiation protection for self, patient & others		
13. Maintain cleanliness: room, equipment, dressing room, restroom		
14. Maintain supplies: room, linen, medical supplies		
15. Utilized basic nursing care and first aid		
16. Practice customer service skills including communication skills & practice proper medical ethics and professionalism		
17. Complete proper departmental paperwork		
18. Process films and reload cassettes as needed		
19. Identify projections and anatomy on finished radiographs		
20. Performs as a Team Member and remained in the assignment with the assigned radiographer		
TOTALS:		

Radiographer: _____ Date: _____

EMERGENCY ROOM RADIOGRAPHY
OBJECTIVE FOR PSYCHOMOTOR SKILLS PROGRESS

Upon instruction by the qualified radiographer and completion of the rotation in the Emergency Room, the student should be able to:

1. Understand/perform x-ray tube warm-up procedures during the majority of this assignment
2. Obtain ER request for exams, complete proper paperwork as required.
3. Position patients for routine procedures.
4. Assess patient condition and vary routine as needed.
5. Plan the film sequence so that the patient is moved as little as possible.
6. Select and set technique, adjusting MA, Time and KVP. Make necessary adjustments in technique based on patient condition and body size and type.
7. Select appropriate accessory equipment as needed (grids, restraints, etc.).
8. Provide necessary radiation protection for self, patient and others.
9. Process films and reload cassettes.
10. Maintain room cleanliness and supplies to include film processing supplies.
11. Practice satisfactory customer service skills, communication, proper medical ethics and professionalism.
12. Provide basic first aid and nursing care as needed.
13. Identify projections and anatomy on finished radiographs.
14. Performs as a Team Member and remain in the assignment with the assigned radiographer.



EMERGENCY ROOM

APPLIED CLINICAL PSYCHOMOTOR SKILLS PROGRESS EVALUATION

Consider the following to evaluate the progression of student psychomotor skills and activities:

First Year is under Direct Supervision and instruction of Radiographer:

3-9 months – Observation, interacting, participating/performing

9-12 months – Interacting and participating/performing

Second Year is under Instruction and Indirect Supervision of Radiographer:

12-24 months – Active participation/performance

BASED ON THE ABOVE, DOES THIS STUDENT:	SAT	UNSAT
1. Understand/perform tube warm-up procedures during the majority of this assignment.		
2. Obtain ER request for exam & complete required paperwork		
3. Position patients for routine procedures.		
4. Assess patient condition; vary routine as needed		
5. Plan film sequence; minimize movement of patient		
6. Select & set technique; make necessary adjustments based on patient size & condition		
7. Select appropriate accessory equipment as needed		
8. Provide radiation protection: self, patient, and others		
9. Process films/image and reload cassettes		
10. Maintain room cleanliness & supplies to include film processing supplies		
11. Practice satisfactory customer service skills, communication, proper medical ethics & professionalism		
12. Provide basic first aid and nursing care		
13. Identify projections and anatomy on finished radiographs		
14. Performs as a team member and remained in the assignment with the assigned radiographer.		
TOTALS:		

In what way(s) did you assist the student to make improvements this week?

What areas did you have to advise the student of during this assignment?

What further recommendations would you suggest for this student?

EVALUATOR _____ Date: _____

SPECIAL PROCEDURES/CARDIOLOGY
OBJECTIVES FOR PSYCHOMOTOR SKILLS PROGRESS

Upon instruction by the qualified radiographer(s) and completion of the rotation in special procedure/cardiology, the student should be able to:

1. Understand/perform x-ray tube warm- procedures.
2. Set up and prepare all image intensification systems including recording devices and monitors.
3. Assist in selecting appropriate supplies including catheters, guide wires, needles, syringes and setting up for special procedures.
4. Assist in preparing contrast media as needed.
5. Practice aseptic and sterile techniques for handling materials and supplies necessary.
6. Assist in setting up equipment to include tube, table, tray, loading and unloading film changers, pressure injectors, setting programmers and controls.
7. Assist in preparing patient for requested procedure.
8. Assist radiographers and physician during procedures.
9. Assist in positioning the patient for radiographs.
10. Label specimens for lab analysis as needed.
11. Practice radiation protection for self, patient, and others.
12. Clean and prepare trays and materials for sterilization.
13. Practice satisfactory customer service skills, communication, proper medical ethics, and professionalism.
14. Practice nursing care and emergency procedures as needed.
15. Complete all paperwork to include sorting radiographs/images as necessary in special procedures.
16. Identify projections and anatomy on finished radiographs/images.
17. Perform as a team member and remain in the assignment with the assigned radiographer.



SPECIAL PROCEDURES/CARDIOLOGY

APPLIED CLINICAL PSYCHOMOTOR SKILLS PROGRESS EVALUATION

Consider the following to evaluate the progression of student psychomotor skills and activities:

Second Year is under the Instruction and Supervision of Radiographer:

12-24 months Active observation, interacting, participating/performance

BASED ON THE ABOVE, DOES THIS STUDENT:	SAT	UNSAT
1. Understands/performs x-ray tube warm-up procedures.		
2. Set up and prepare all image intensification systems, including recording devices and monitors.		
3. Assist in selecting appropriate supplies (catheters, guide wires, needles, syringes and setting up for special procedure)		
4. Assist in preparing contrast media as needed.		
5. Practice aseptic and sterile techniques		
6. Assist in setting up equipment to include tube, table trays, loading and unloading film changers, pressure injectors, setting programmer and controls.		
7. Assist in preparing patient for requested procedures		
8. Assist radiographers and physician during procedures		
9. Assist in positioning the patient for radiographs		
10. Label specimens for lab analysis as needed		
11. Practice radiation protection for self, patient and others		
12. Clean and prepare trays and materials for sterilization		
13. Practice satisfactory customer service skills, proper medical ethics and professionalism		
14. Practice nursing care and emergency procedures as needed		
15. Complete all paperwork including sorting radiographs		
16. Identify projections and anatomy on finished radiographs/images		
17. Performs as a team member and remained in the assignment with the assigned radiographer		
TOTALS:		

Suggestions and Recommendations for this student:

Evaluator _____ Date _____



PORTABLE AND SURGICAL RADIOGRAPHY

APPLIED CLINICAL PSYCHOMOTOR SKILLS PROGRESS EVALUATION

Consider the following to evaluate the progression of student psychomotor skills and activities:

First Year is under Direct Supervision and instruction Radiographer:

3-9 months – observation, interacting, participating/performing

9-12 months – Interacting and participating/performing

Second year is under instruction and Indirect supervision of Radiographer:

12-24 months – Active participation/performance

BASED ON THE ABOVE, DOES THIS STUDENT:	SAT	UNSAT
1. Utilize rules of body mechanics for safety of self, patient and others		
2. Perform proper completion of paperwork and sorting of radiographs		
3. Manipulate and set up portable equipment to obtain desired radiographs according to patient and environment conditions		
4. Make necessary positioning changes according to patient position and condition		
5. Assist in setting and making necessary adjustment in exposure settings		
6. Provide necessary radiation protection for patient, self & others		
7. Utilize proper safety techniques and take proper precautions against electrical hazards		
8. Practice satisfactory customer service skills, communication, proper medical ethics and maintain professional manner		
9. Practice medical sepsis in patient rooms and all mobile radiographic assignments		
10. Process film or images; reload cassettes as needed		
11. Label films as necessary, and identify projections and anatomy on finished radiographs/images		
12. Performs as a team member and participates in all assigned mobile procedures and remains with assignment and assigned radiographer		
TOTALS		

Suggestions and recommendations for this student:

Evaluator _____ Date _____

AFTERNOON SHIFT/WEEKENDS

OBJECTIVE FOR PSYCHOMOTOR SKILLS PROGRESS

Upon instruction by qualified radiographer and completion of rotations on afternoon or weekend assignments, the student will have encountered various types of patients that are not usually available during regular day shift hours. These may include emergency or trauma procedures such as accident victims, gunshot wounds, and other injuries which may occur as a result of vehicular, recreational or occupational accidents and which may occur more frequently during evening and weekend hours. Students are not assigned to a specified area or room of the imaging department since radiographic procedures may be performed in areas such as the main department, emergency room or by mobile radiography. Therefore, the student is assigned by the afternoon clinical instructor with a registered radiographer. After rotations on these assignments, the student should be able to:

1. Perform departmental paper work to include sorting and marking of radiographs for proper completion of required exams.
2. Assist in selecting the most appropriate area in which to radiograph each patient based on the required exam, patient condition and ability to cooperate.
3. Position the patient, varying routine as required due to patient condition.
4. Assist in planning the imaging sequence so that the patient is moved as little as possible.
5. Assist in selecting and setting technique and making necessary adjustments.
6. Provide necessary radiation protection for self, patient and others.
7. Assist in making radiographs with mobile units as required.
8. Select appropriate accessory equipment as needed.
9. Assist in directing and transporting patient flow to best utilize personnel and facilities.
10. Process images; reload cassettes.
11. Practice satisfactory customer service skills, communication, proper medical ethics and maintain professional manner.
12. Provide basic first aid and nursing care as needed.
13. Identify projections and anatomy on finished radiographs.
14. Perform as a team member and participate in all assigned procedures and remain with assigned radiographer.



AFTERNOON SHIFT/WEEKENDS

APPLIED CLINICAL PSYCHOMOTOR SKILLS PROGRESS EVALUATION

Consider the following to evaluate the progression of student psychomotor skills and activities:

First Year is under Direct supervision and instruction of Radiographer:

3-9 months – Observation, interacting, participating/performing

9-12 months – Interacting and participating/performing

Second Year is under instruction and Indirect supervision of Radiographer:

12-24 Months – Active participation/performance

BASED ON THE ABOVE, DOES THIS STUDENT:	SAT	UNSAT
1. Perform departmental paperwork, sorting and making of radiographs for completion of exam		
2. Assist in selecting the most appropriate area in which to radiograph each patient based on the required exam, patient condition and ability to cooperate		
3. Position the patient, varying routine as required due to patient condition		
4. Assist in planning the filming sequence so that the patient is moved as little as possible.		
5. Assist in selecting and setting technique and making necessary adjustments.		
6. Provide necessary radiation protection: self, patient & others		
7. Assist in making radiographs with mobile units as required		
8. Select appropriate accessory equipment as needed		
9. Assist in directing and transporting patient flow to best utilize personnel and facilities		
10. Process images; reload cassettes		
11. Practice satisfactory customer service skills, communication proper medical ethics and maintain professional manner		
12. Provide basic first aid and nursing care as needed		
13. Identify projections and anatomy on finished radiographs		
14. Performs as a team member and participates in all assigned procedures and remains with assigned radiographer		
TOTALS		

Suggestions and recommendations for this student:

Evaluator _____ Date _____

ULTRASOUND
OBJECTIVE FOR PSYCHMOTOR SKILLS PROGRESS

After instruction by a qualified sonographer and rotation in ultrasound, the student should be able to assist the sonographer in utilizing this imaging modality for diagnosis:

1. Assist the sonographers in obtaining patient history and data pertinent to ultrasound examination.
2. Assist in patient preparation including changing into hospital gown, explanation of procedure, preparing the exam table and draping patient.
3. Assist in set up of required imaging equipment.
4. Assist in instructing or positioning the patient for appropriate ultrasound exam.
5. Observe the operation of the ultrasound scanner and assist in recording images.
6. Observe the various procedures and methods of scanning.
7. Identify anatomy on finished image.
8. Assist in stocking supplies and cleanliness of room and facility.
9. Follow various other instructions related to the assignment.
10. Practice satisfactory customer service skills, communication, proper medical ethics and professionalism.
11. Practice patient care and basic first aid as needed.
12. Assist in completing paperwork to include sorting of images and labeling as required.
13. Perform as a team member and participate in all assigned examinations and remain with the assigned sonographers.



ULTRASOUND

APPLIED CLINICAL PSYCHOMOTOR SKILLS PROGRESS EVALUATION

Consider the following to evaluate the progression of student psychomotor skills and activities:

Second Year is under instruction and Direct supervision of the Sonographer:

12-24 months – Active observation, interacting, participating/ performance

BASED ON THE ABOVE, DOES THIS STUDENT:	SAT	UNSAT
1. Assist the sonographers in obtaining patient history and data pertinent to ultrasound examination		
2. Assist in patient preparation: gowning, explain procedure, prepare table and drape patient		
3. Assist in set up of required imaging equipment		
4. Assist in the instructing or positioning the patient for appropriate ultrasound exam		
5. Observe the operation of the ultrasound scanner and assist in recording images.		
6. Observe the various procedures and methods of scanning.		
7. Identify anatomy on finished image		
8. Assist in stocking supplies and cleanliness of room and facility		
9. Follow various other instructions related to this assignment		
10. Practice satisfactory customer service skills, communication, proper medical ethics and professionalism		
11. Practice patient care and basic first aid as needed		
12. Assist in completing paperwork; sorting of images and labeling as required		
13. Performs as a team member and participates in all assigned examinations and remains with assigned sonographers		
TOTALS		

Suggestions and recommendations for this student:

Evaluator _____ Date _____

NUCLEAR MEDICINE

OBJECTIVES FOR PSYSHOMOTOR SKILLS PROGRESS

Upon instruction by a qualified technologist and completion of the assignment in Nuclear Medicine, the student should be able to observe and assist the technologist in the performance of radionuclides for diagnosis imaging.

1. Observe and/or assist with the injection of isotopes, administration.
2. Assist the technologist in obtaining patient data pertinent to the procedure.
3. Observe and/or assist the technologist in conducting various exams.
4. Observe and/or assist with the selection and attachment of various accessory equipment devices.
5. Assist the patient into positions needed for various studies.
6. Observe the operation of computer assisted imaging functions.
7. Observe and understand the explanation of the imaging and graphic displays with various imaging procedures.
8. Practice basic nursing care procedures as needed.
9. Practice satisfactory customer skills, proper medical ethics and professionalism.
10. Participate in completing required paper work and sorting of images when required.
11. Identify anatomy on completed images.\
12. Performs as a team member and participates in all assigned examinations and remains with the assigned technologist.



NUCLEAR MEDICINE

APPLIED CLINICAL PSYCHOMOTOR SKILLS PROGRESS EVALUATIONS

Consider the following to evaluate the progression of student psychomotor skills and activities:

Second Year is under instruction and Direct supervision of Technologist:

12-24 months – Active observation, interacting, participating/ performance

BASED ON THE ABOVE, DOES THIS STUDENT:	SAT	UNSAT
1. Observe and/or assist with the injection of isotope administration		
2. Assist the technologist in obtaining patient data pertinent to the procedure.		
3. Observe and/or assist the technologist in conducting various exams		
4. Observe and or assist with the selection and attachment of various accessory equipment devices		
5. Assist the patient into positions needed for various studies		
6. Observe the operation of computer assisted imaging functions		
7. Observe and understand the explanation of the imaging and graphic displays with various imaging procedures		
8. Practice basic nursing care procedures as needed		
9. Practice satisfactory customer service skills, communication, and proper medical ethics and professionalism		
10. Participate in completing required paperwork and sorting of images when required		
11. Identify anatomy on completed images		
12. Performed as a team member and participated in all assigned examinations and remained with assigned technologist		
TOTALS		

Suggestions and recommendations for this student:

Evaluator _____ Date _____

COMPUTERIZED TOMOGRAPHY OBJECTIVES FOR PSYCHOMOTOR SKILLS PROGRESS

Upon instruction by a qualified radiographer and completion of the assignment in computerized tomography, the student should be able to observe and assist the technologist in the utilizing of this imaging modality for diagnosis:

1. Assist in obtaining patient data, such as clinical history and allergies.
2. Assist in explaining the procedure to the patient.
3. Assist in positioning the patient for various scans.
4. Assist in preparation of contrast media with needed.
5. Provide radiation protection for patient, self and others.
6. Assist in typing patient information into computer for scan.
7. Observe and attend to patient providing patient care and basic first aid.
8. Assist in selection and use of appropriate accessory devices needed for exam and assist in the operation of the CT Scanner.
9. Practice satisfactory customer service skills, communication, proper medical ethics and professionalism.
10. Complete required paperwork to include sorting and labeling of images as required.
11. Identify anatomy on sectional scans.
12. Performs as a team member and participates in all assigned examinations and remains with assigned radiographer.



**COMPUTERIZED TOMOGRAPHY
APPLIED CLINICAL PSYCHOMOTOR SKILLS PROGRESS EVALUATION**

Consider the following to evaluate the progression of student psychomotor skills and activities:

Second Year is under instruction and Direct supervision of Technologist:

12-24 months – Active observation, interacting, participating/ performance

BASED ON THE ABOVE, DOES THIS STUDENT:	SAT	UNSAT
1. Assist in obtaining patient data, such as clinical history and allergies		
2. Assist in explaining the procedure to the patient		
3. Assist in positioning the patient for various scans		
4. Assist in preparation of contrast media when needed		
5. Provide radiation protection for patient, self, and others		
6. Assist in typing patient information into computer for scan		
7. Observe and attend to patient providing patient care and basic first aid when needed		
8. Assist in selection and use of appropriate accessory devices needed for the exam and assist in the operation of the CT Scanner		
9. Practice satisfactory customer service skills, communication, proper medical ethics and professionalism		
10. Complete required paperwork to include sorting and labeling of images as required		
11. Identify anatomy on sectional scans		
12. Performed as a team member and participated in all assigned examinations and remained with the assigned radiographer		
TOTALS		

Suggestions and recommendations for this student:

Evaluator: _____ Date _____

RADIATION ONCOLOGY

OBJECTIVE FOR PHYCHOMOTOR SKILL PROGRESS

Upon instruction and direct supervision by a qualified therapist and completion of the assignment in the Radiation Oncology Department, the student will be able to assist with the administration of various forms of radiation in the treatment of pathology and observe patient care and procedures. Specifically you will be able to:

1. Greet and escort patients from waiting area to treatment area and assist patients in preparing for their treatment. Assist patients onto and off the treatment tables.
2. Observe operation of Linear Accelerator.
3. Observe operation of Simulator.
4. Observe operation of Block creation.
5. Observe operation of dosimetry equipment and treatment planning.
6. Observe and assist the Oncology Nurse in interviewing and assessing patients prior to their visit with the Radiation Oncologist.
7. Assist Radiation Therapist in setting up treatment room prior to patient being brought in.
8. Observe the Radiation Oncology team as they set up treatment fields.
9. Observe the Radiation Therapist in daily recording of data in charts.
10. Assist in monitoring patients' condition during treatments.
11. Observe the Radiation Therapist in obtaining localization films.
12. Assist in processing localization films
13. Assist in cleaning up treatment rooms after patients are completed.
14. Practice satisfactory customer skills, good communication, proper medical ethics and professionalism.
15. Utilize appropriate medical techniques and patient care procedures when necessary.
16. Perform as a team member and predicate in all assigned treatment plans and remain with assigned therapist.



RADIATION ONCOLOGY
APPLIED CLINICAL PSYCHOMOTOR SKILLS PROGRESS EVALUATION

Consider the following to evaluate the progression of student psychomotor skills and activities:

Second Year is under instruction and Direct supervision of Technologist:

12-24 months – Active observation, interacting, participating/ performance

BASED ON THE ABOVE, DOES THIS STUDENT:	SAT	UNSAT
1. Greet and escort patient from waiting area to treatment room; assist patients in preparation for treatment and assist patients onto and off the treatment tables		
2. Observe operations of Linear Accelerator		
3. Observe operation of simulator		
4. Observe operation of block creation		
5. Observe operation of dosimetry equipment and treatment planning		
6. Observe and assist the oncology nurse in interviewing and assessing patients prior to visit with the Radiation Oncologist		
7. Assist Radiation Therapist in setting up treatment room prior to patient arrival		
8. Observe the Radiation Oncology team as the set-up of treatment fields are performed		
9. Observe the Radiation Therapist in daily recording of data in charts		
10. Assist in monitoring patients' condition during treatment		
11. Observe the Radiation Therapist in obtaining localization films		
12. Assist in the processing localization films		
13. Assist in cleaning up treatment rooms after patients are completed		
14. Practice satisfactory customer service skills, good communication, proper medical ethics and professionalism		
15. Utilize appropriate medical techniques and patient care procedures as needed		
16. Performed as a team member and participated in all assigned treatment plans and remained with the assigned Therapist		
TOTALS		

Suggestions and recommendations for this student:

Evaluator _____ Date _____

PHLEBOTOMY

OBJECTIVES FOR PHYCHOMOTOR SKILLS CERTIFICATION

Upon the instruction by a qualified phlebotomist and completion of the assignment in phlebotomy, the second year student should be able to observe and assist the phlebotomy technician in the following and attain proficiency:

1. When entering the patient's room:
 - a. knock before entering
 - b. exhibit a pleasant attitude and be courteous
 - c. Identify yourself and the purpose of the visit
 - d. wash your hands
2. Make sure of correct patient identification:
 - a. check the patient ID armband
 - b. crosscheck with the request slip
3. Correct Venipuncture technique:
 - a. assemble the adapter and needle
 - b. select proper tubes and apply tourniquet
 - c. locate and cleanse the site
 - d. introduce the needle
 - e. completely fill the tube
 - f. mix with anticoagulant
 - g. release the tourniquet
 - h. withdraw the needle
 - i. apply pressure at the site
 - j. check the site and bandage the area
 - k. check patient bedrail for proper position
4. Properly label the tube and request slip
5. Dispose of supplies and needles properly
 - a. disposable items in trashcan
6. Wash hands
7. Be courteous when exiting patient's room
8. Perform as a team member using professionalism

Columbus Technical College
School of Radiologic Technology

PHLEBOTOMY CLINICAL COMPETENCY EVALUATION

Student: _____ Date: _____

On completion of Venipuncture Instruction and demonstration, the student's performance of Venipuncture will be evaluated with the following criteria:

CHECKLIST: (A) PERFORMED
(B) NEEDS IMPROVEMENT
(I) NOT PERFORMED

Venipuncture of <u>Artificial Arms/Actual Patient</u> :		<u>Artificial Arm</u>	<u>Patient</u>
_____	1. Washes hands before approaching patient.	_____	_____
_____	2. Dons gloves and gown.	_____	_____
_____	3. Approaches patient.	_____	_____
_____	4. Identification of patient.	_____	_____
_____	5. Explains procedure.	_____	_____
_____	6. Selects equipment.	_____	_____
_____	7. Prepares equipment (includes inspecting the seal of the needle).	_____	_____
_____	8. Organizes equipment.	_____	_____
_____	9. Positions patient's arm.	_____	_____
_____	10. Applies tourniquet.	_____	_____
_____	11. Uses index finger to palpate for a Venipuncture site.	_____	_____
_____	12. Cleanses Venipuncture site by moving alcohol in concentric circles from puncture site outward.	_____	_____
_____	13. Allows site to air dry.	_____	_____
_____	14. Positions evacuated tube holder; uncaps needle.	_____	_____
_____	15. Inspects needle for manufacturer's defects.	_____	_____
_____	16. Anchors vein with thumb and index finger.	_____	_____
_____	17. Inserts needle, bevel up, at correct angle.	_____	_____
_____	18. Inserts needle in same direction as the vein.	_____	_____
_____	19. Pushes evacuated tube onto needle, without moving the holder.	_____	_____
_____	20. Draws evacuated tubes in the appropriate order.	_____	_____

			<i>Over</i>	
_____	21.	Releases tourniquet.	_____	_____
_____	22.	Removes last evacuated tube from the back of the needle.	_____	_____
_____	23.	Places gauze over puncture site.	_____	_____
_____	24.	Withdraws needle and discards immediately in a needle disposal unit.	_____	_____
_____	25.	Gently inverts tubes with additives 5 to 10 times following the draw.	_____	_____
_____	26.	Inspects puncture site. Applies bandage, if needed.	_____	_____
_____	27.	Labels tube(s) with appropriate information.	_____	_____
_____	28.	Labels tubes immediately following the draw.	_____	_____
_____	29.	Discards materials contaminated with blood in the biohazard bag. Removes equipment.	_____	_____
_____	30.	Removes gloves and washes hands.	_____	_____
_____	31.	Leaves patient courteously.	_____	_____

COMMENTS:

Supervising Phlebotomist Signature

Date

Student Signature

Date

MAGNETIC RESONANCE IMAGING OBJECTIVE FOR PSYCHOMOTOR SKILLS PROGRESS

Upon instruction by a qualified radiographer and completion of the assignment in MRI, the student should be able to observe and assist the technologist in utilizing this imaging modality for diagnosis:

1. Assist in obtaining pertinent patient data, such as clinical history and allergies.
2. Assist in explaining the procedure to the patient.
3. Assist in movement of patients, as needed, into and out of the MRI unit.
4. Assist in positioning the patient for various scans.
5. Assist in preparation of contrast media when needed.
6. Assist in typing patient information into computer for scan.
7. Observe and attend to patient providing patient care and basic first aid when needed.
8. Assist in selection and use of appropriate accessory devices needed for exam and assist in the operation of the MRI scanner.
9. Practice satisfactory customer service skills, good communication, proper medical ethics and professionalism
10. Complete required paperwork to include sorting and labeling of images as required.
11. Identify anatomy on sectional scans.
12. Assist in processing of images
13. Performs as a team member and participates in all assigned examinations and remains with the assigned radiographer.



**MAGNETIC RESONANCE IMAGING
APPLIED CLINICAL PSYCHOMOTOR SKILLS PROGRESS EVALUATION**

Consider the following to evaluate the progression of student psychomotor skills and activities:

Second Year is under instruction and Direct supervision of Technologist:

12-24 months – Active observation, interacting, participating/ performance

Based on the above, does this student:	SAT	UNSAT
1. Assist in obtaining pertinent patient data, such as clinical history and allergies		
2. Assist in explaining the procedure to the patient		
3. Assist in movement of patients, into and out of the MRI unit as needed		
4. Assist in positioning the patient for various scans		
5. Assist in preparation of contrast media when needed		
6. Assist in typing patient information into computer for scan		
7. Observe and attend to patient providing patient care and basic first aid when needed		
8. Assist in selection and use of appropriate accessory devices when needed for the exam and assist in the operation of the MRI scanner		
9. Practice satisfactory customer service skills, good communication, proper medical ethics and professionalism		
10. Complete required paperwork to include sorting and labeling of images as required		
11. Identify anatomy on sectional scans		
12. Assist in processing of images		
13. Performed as a team member and participated in all assigned examinations and remained with the assigned radiographer		
TOTALS		

Suggestions and recommendations for this student:

Evaluator _____ Date _____

OBJECTIVE FOR PSYCHOMOTOR SKILLS PROCESS

The purpose of these assignments is to familiarize the new student with the job task and duties of the ancillary personnel within the Imaging Services Departments and to emphasize the importance of team work and quality patient care. With this familiarization, it is expected that the student will be better able to understand the operation of the department as a unit and to observe how all personnel function together as a team in performing their duties in order to accomplish its mission. Upon completion of these rotations with observation, instruction and demonstration, the student should be able to continue in other radiographic assignments with a better understanding of these tasks.

Recording Keeping – Front Office Procedures

A. Observe and assist a qualified radiographer or the front office clerical personnel in the following functions:

1. Practice good customer service standards as defined in the classroom instruction and as stated in the policy and procedures for the Imaging Department. These customer service standards include patients, visitor, personnel and physicians.
2. Observe and learn to prepare x-ray request and film file folders or process for image storage.
3. Observe and learn to use the computer to enter, complete and record exam information.
4. Observe and assist in filing or retrieving x-ray reports
5. Observe and assist in filing or retrieving x-ray film file folders

Transporting/Escorting

B. Observe and assist a qualified radiographer or escort personnel of inpatients to and from a patient's room, holding and waiting area, to the Imaging Department or to a radiographic room.

1. Utilize proper body mechanics.
2. Utilize appropriate patient care methods, which may be determined by the patient's medical condition.
3. Utilize appropriate ethical conduct and professionalism
4. Utilize appropriate communication techniques and customer/guest relations standards.

Processing Procedures

C. Observe and assist a qualified radiographer in performing darkroom/image processing functions:

1. Maintain a clean and dry environment
2. Inspect and keep film storage bins loaded and organized with proper sizes and types of film
3. Practice safely loading and unloading cassettes.
4. Correctly identify films/images as necessary
5. Correctly process films/cassettes
6. Proper loading of developer and fixer in replenishment systems as needed.
7. Proper handling and processing of cassettes used in computerized imaging.

The weekly progress evaluations for various clinical assignments incorporate the above tasks. The successful and continual progress of the student is achievable as the program is satisfactorily completed.

III. CLINICAL PROFICIENCY/COMPETENCY PROGRAM

APPLIED CLINICAL PROFICIENCY

OVERVIEW:

It is the intent of these clinical education plans to provide a standardized format for the evaluation of clinical performance within the School of Radiologic Technology at Columbus Technical College.

It is necessary that cognitive (classroom) and psychomotor (clinical) aspects of this curriculum occur simultaneously and become integrated. To assure meaningful clinical participation and success, the student should master cognitive aspects. Those cognitive aspects include: Human Anatomy and Physiology, Radiographic Procedures, and Principles of Radiographic Exposure.

Integration of cognitive and psychomotor aspects in Radiologic Technology occurs in stages:

1. The student begins clinical participation by first observing and concurrently assisting a practicing Radiologic Technologist in assigned duties.
2. Participation moves from more passive modes to more active modes of assistance during radiographic examinations. The rate of student progress is dependent upon the ability of the individual student to integrate cognitive and psychomotor aspects as well as comprehend assigned tasks. At this point, the student is performing procedures and duties under DIRECT supervision of a radiographer.
3. As the student gains experience, he moves into an independent clinical performance stage, once deemed competent to perform procedures unassisted. At this point, the student can be performing procedures under the INDIRECT supervision of an RT.
4. The program director informs the students as to the required number of times specific radiographic procedures must be satisfactorily performed. The student is only allowed to repeat an exam once under the DIRECT supervision of the radiographer. Should the image require an additional repeat, the radiographer must repeat the image.

When the student has performed the procedures at an acceptable level of performance, within the recommended number of trials, the specified number of times, he/she will “challenge” a clinical proficiency evaluation (not the evaluator), in which he/she will demonstrate skill and competency in that particular examination.

This approach provides the student with the opportunity to progress at an individual rate consistent with his/her ability, knowledge and motivation.

Though the student may successfully complete a proficiency evaluation early in the clinical education, continuing performance should remain aggressive in order to excel and complete “Continued Competency” evaluations.

This concept of clinical competency evaluation considers student performance as a constant when measured by the evaluation checklist (enclosed); time becomes the variable.

PERTINENT TERMS AS DEFINED IN THE GLOSSARY OF STANDARDS FOR AN ACCREDITED EDUCATIONAL PROGRAM IN RADIOLOGICAL SCIENCES BY THE JOINT REVIEW COMMITTEE ON EDUCATION IN RADIOLOGIC TECHNOLOGY:

1. Competency Based: Student attainment of a specified level of proficiency.
2. Direct Supervision: Student supervision by a qualified practitioner, who reviews the procedure in relation to the student's achievement, evaluated the condition of the patient in relation to the student's knowledge, is present during the procedure, and reviews and approves the procedure. A qualified radiographer is present during student performance of a repeat of any unsatisfactory radiograph.
3. Indirect Supervision: For Radiography, that supervision provided by a qualified practitioner immediately available to assist student. Immediately available is interpreted as the physical presence of a qualified practitioner 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.
4. Qualified Practitioner: A radiographer possessing American Registry of Radiologic Technologist certification or equivalent and active registration in the pertinent discipline and practicing in the profession.

*Please refer to *Standards for an Accredited Educational Program in Radiologic Sciences*

EXAMPLE OF CLINICAL EDUCATION OBJECTIVES:

SPECIFIC OBJECTIVES:

The student will:

- Perform and/or assist with each radiographic procedure assigned to that room. Level of supervision: Direct supervision of a registered Radiologic technologist.
- Perform independently in areas of successful completion, dependent upon level of student.
- Be able to:
 1. Evaluate each requisition
 2. Demonstrate proper physical facilities readiness
 3. Demonstrate proper patient-technologist relationship
 4. Demonstrate correct positioning skills
 5. Manipulate equipment effectively
 6. Show evidence of radiation protection
 7. Evaluate the radiographic image for:
 - a. anatomical parts
 - b. proper alignment
 - c. radiographic technique
 - d. film/image identification
 - e. evidence of radiation protection
- Be evaluated for Clinical Proficiency
- Perform at a minimum mastery level of 85%.

The Proficiency Evaluation tool (grade sheet) attached is utilized to evaluate performances.

Number of views for each specific exam is determined by the individual clinical sites and their list of routines. Students shall have been introduced to these routines during classroom instruction and shall have knowledge of these requirements through clinical participation.

QUALIFYING PROCEDURE FOR PROFICIENCY EVALUATIONS

- I. The examination must have been reviewed in Lab and checked off by the instructor prior to attempting performance in the clinical setting.
In cases when the examination has been deferred from the previous semester, the examination must be completed by the end of the following semester to avoid reduction in grade.
- II. The student attempt an examination as many times as is needed to become comfortable in performing the exam before requesting to perform the exam for competency.
- III. The student must inform the R.T. Evaluator of his/her intent to challenge a proficiency evaluation prior to the exam.
- IV. The Student must successfully complete the challenge:
 - A. Without assistance
When an obvious error that would invalidate the examination or would or would endanger the patient is seen, the R.T. evaluator must intervene and complete the examination. This condition would warrant a failure on the evaluation, and the student would be advised to a reinforcement practice period before attempting another challenge of that examination type.
 - B. With direct supervision
See A. above
Reference: glossary of terms, Standards (JRCERT)
 - C. Without any repeats
 - D. With 85% accuracy
 - E. In view of hospital/clinic policies, students will be allowed to assist rather than perform certain radiographic procedures. These are indicated on the student checklists, by and (*).
- V. Grading shall be completed by the R.T. evaluator.
Grading: Total number of points attainable = 32
29-32 = A
26-28 = B
25 & below = F (failure)

Mastery vs. Non-Mastery is the factor in the grading system of this evaluation tool. When a student challenges a proficiency evaluation, he/she should feel just that – proficient. A rating of 0 would indicate that an area of performance was unacceptable. In other words, the area had NOT been mastered. A rating of 2 would indicate an acceptable area, or mastery of that area.

In view of the nature of Radiologic Technology, its source, its patient contact, and its constant strive toward professional recognition, it is felt that student of the field should strive for complete mastery of its skills and knowledge.

- VI. If one failure of a specific challenge is recorded, only one (1) return challenge will be permitted.
- VII. Upon successful mastery of a specific radiographic examination, the student may then proceed to challenge the proficiency evaluations to complete the requirements for that specific semester.
- VIII. Continued competency refers to continuously attaining competency over and over again in the performance of procedures already challenged to continue to improve the skills required that that procedure. Procedures will be duplicated each semester throughout the program.
- IX. The categories are specified below and listed are the exams included in each. The student should consult this list each semester and maintain their own record of those exams completed previously by using the enclosed checklist. The Clinical Coordinator will send out an updated Master list of proficiencies completed at least twice each semester for the student to review.

CATEGORIES FOR CLINICAL PROFICIENCIES

Examinations NOT marked with an asterisk* are Mandatory.
Examination marked with an asterisk * are defined as Electives.
15 of 34 Electives must be demonstrated as competent.

<u>UPPER EXTREMITY</u>	<u>LOWER EXTREMITY</u>	<u>PELVIS/SPINE</u>
Finger or thumb	*Toes	Pelvis
Hand	Foot	Hip
Wrist	*Calcaneus	*SI joints
Forearm	Ankle	Cervical Spine
Elbow	Tibia/fibula	Thoracic Spine
Humerus	Knee	Lumbar Spine
Shoulder	*Patella	Cross-table Lateral
Trauma extremity	Femur	Spine
Clavicle	Trauma Extremity	Cross-table Lateral
Scapula		Hip
*AC joints		*Sacrum and/or Coccyx
Trauma shoulder		* Scoliosis Series
		*Larynx-soft tissue

THORAX

Chest routine
*Chest decubitus
Chest (wheelchair or stretcher)
Ribs
*Sternum

PEDIATRICS

Peds Chest (>6 y/o)
*Peds Upper Ext.
*Peds Lower Ext.
*Peds Abdomen
*Peds Portable Exam

GERIATRICS

Chest
Upper Extremity
Lower Extremity

SKULL

*Skull (diag. or trauma)
*Sinuses
*Facial bones
*Orbits
*Zygomatic Arches
*Nasal Bones
*Mandible
*T-M Joints

GI/ABDOMEN

Abdomen Supine (KUB)
Abdomen Upright
*Abdomen Decubitus
*Intravenous Pyelogram
Upper GI, w/wo Air
Contrast Enema, w/wo Air
*Small Bowel Series
*Esophagram
*Cystography/
Cystoureterogram
*ERCP
*Myelography
*Arthrography
*Hysterosalpingography
*Video Swallowing Study

MOBILE AND SURGICAL PROCEDURES

Chest – routine
Abdomen/KUB
Orthopedic
C-Arm Requiring More than One Projection
Surgical C-Arm Requiring Manipulation around a Sterile Field

GENERAL PATIENT CARE

CPR Certified
Vital Signs- Blood Pressure
Vital Signs- Temperature
Vital Signs- Pulse
Vital Signs- Respirations
Vital Signs- Pulse Oximetry
Sterile and Medical Aseptic Technique
Venipuncture
Transfer of Patient
Care of Patient Medical Equipment (oxygen tank, IV tubing, etc)

- X. **MINIMUM REQUIREMENTS:** All students shall complete the minimum number of radiographic exams per semester. Students not achieving a minimum of exams will be given a grade determined by dividing the number of exams performed by the number of exams required. Required exams not completed by the end of the semester will be carried over to the next semester and added to the required exams for that semester. This will result in a reduction in Proficiency grade for that semester. All proficiencies must be completed by the end of the last semester in order to graduate from the program. Simulation of exams that are not often available may be allowed as necessary.



Applied Clinical Proficiency Performance

Student _____ **Semester** _____
Date Exam _____
Performed _____ **Hospital** _____ **Room** _____
Patient Information: Exam _____
Projections/Views _____

Rating:

0 = Unsatisfactory 1 = Acceptable/needs Improvement 2 = Satisfactory/acceptable

PERFORMANCE CRITERIA:	RATING	COMMENTS:
1. Interpretation of Request		
2. Facilities readiness/room/equipment, supplies		
3. Equipment Use/Manipulation		
4. Patient Care, Safety		
5. Proper selection – film and accessories		
6. Correct Positioning – anatomy/rotation/angle		
7. Correct centering – film(IR), part, tube		
8. Correct Technical Factors		
9. Radiation Protection – collimation, shielding		
10. Correct Markers and film/image I.D.		
IMAGE EVALUATION CRITERIA:		
1. Correct centering and tube part film (IR) alignment		
2. Proper Density, Contrast, and Recorded Detail		
3. Correct position/part rotation		
4. Correct Patient/film ID and Markers		
5. Radiation protection/collimation and shielding		
6. Performance in: communication, problem-solving, and critical thinking.		
TOTAL POINTS OF PERFORMANCE EVALUATION		PROF. GRADE: _____

The exam was performed by the student with appropriate supervision and no repeated films. I observed the performance and reviewed the films/images with the student.

RT Signature _____ **Date:** _____

CRITERIA FOR APPLIED CLINICAL PROFICIENCY EVALUATIONS

Students will be able to:

I. PERFORMANCE CRITERIA

1. Interpretation of Requisition
 - Identify the procedure to be done and the history
 - Identify the patient's name, age, and mode of travel
2. Facilities Readiness
 - Radiographic table and equipment turned on, clean, cassettes ready
 - Room stocked with linens, emesis basins, syringes, etc
3. Equipment use
 - Safely operate standard radiographic and fluoroscopic or mobile equipment
 - Safely operate tomographic equipment or any other equipment required to perform the exam being evaluated
 - Turn tube from horizontal to vertical and vice versa, identify and utilized tube locks
 - Insert and remove cassettes properly
 - Select technical factors; use technique chart, measuring patient
4. Patient care and handling
 - Locate correct patient and assist patient to and from room and table
 - Have patient gowned properly; keep covered for privacy
 - Explain procedure to patient in calm manner
 - Give proper moving and breathing instructions
 - Follow correct procedures for isolation patient
5. Correct Accessory selection and use
 - Select the proper cassette size or IR, grids, etc.
 - Use immobilization devices as needed, sponges, sandbags, etc.
 - Fill syringes with correct contrast media or other solutions using aseptic technique when applicable
6. Correct radiographic positions
 - Place the patient correctly on the table and assist in required positions
 - Place cassette and body part in correct relationship
 - Correct angulation and centering of tube
7. Correct centering
 - Align center of part to the center of the film
 - Center CR to the center of the IR and part
 - Angle CR to correct anatomical part
8. Correct technical factors
 - Measure the patient and use a technique chart
 - Adjust exposure factors for body habitus, pathology, and motion
 - Adapt exposure factors for changes in FFD, Grid ratio, collimation
9. General Radiation protection
 - Cone and collimate to the part
 - Use gonadal shields where applicable
 - Select proper exposure factors
 - Wear lead apron and gloves as appropriate
 - Keep door to radiographic room closed; ask any person in vicinity of the patient to move away before making an exposure
10. Correct markers
 - Properly place right or left markers and patient ID on film
 - Use time markers correctly as needed

II. IMAGE CRITERIA

1. Correct centering and alignment
 - Correct transverse and longitudinal centering
 - Correct tube-part-film alignment
 - Correct SID and CR angulation
 - Correct anatomical part

2. Correct density, contrast and recorded detail
 - Proper density, contrast and recorded detail
 - Factors adjusted for pathology or motion
 - Correct cassette, grid, etc
 - No motion, grid lines, or artifacts
3. Correct position and rotation of part
 - Body part in proper position and rotation
4. Correct patient ID and Markers
 - Right/left markers correctly placed
 - Time and/or position markers correctly placed
 - Patient information; name, number, etc. visible
5. Evidence of radiation protection
 - Cone or collimation marks visible
 - Gonadal shield visible where applicable
 - NO repeats

NOTE : The student will be able to critique the image and identify anatomical structures demonstrated.

RADIOGRAPHIC ROOM SET UP PROFICIENCY

HOSP _____ STUDENT _____ DATE _____

EXAM: (circle) **Ba. Enema – 1 2** **GI Series – 1 2** **Myelogram – 1 2**

I. ROOM PREPAREDNESS	SAT	UNSAT
A. Room Setup to include:		
(1) Cleanliness of room and patient restroom is satisfactory		
(2) Stock Linen and additional supplies		
(3) Select and prepare appropriate contrasts media		
II. OVERHEAD RADIOGRAPHIC TUBE:	SAT	UNSAT
A. Identify and operate Overhead Tube -which includes:		
(1) locks, buttons for movement, centering		
(2) Operate collimator: Light, Select central ray and field sizes		
(3) identify, select and utilize distance indicators		
(4) identify, select and utilize angulation indicators		
III. RADIOGRAPHIC TABLE	SAT	UNSAT
A. Identify and operate which includes:		
(1) Table top movement - upward, downward and tilt movement		
(2) Operate Bucky tray inc. loading & unloading cassette properly		
(3) Shoulder braces placed properly - if needed		
(4) Footboard placed properly - if needed		
IV. FLUOROSCOPIC IMAGE INTENSIFIER UNIT	SAT	UNSAT
A. Identify and Operate which includes:		
(1) Place in operation; operate appropriate locks, switches, and buttons		
(2) Select and place in operation spot film or film camera		
(3) Set MA, TIME, KVP and Fluoro timer		
V. WALL BUCKY UNIT	SAT	UNSAT
A. Identify and Operate which includes:		
(1) Bucky switches and locks		
(2) Manipulate tray, loading and unloading cassette properly		
(3) Movement of tray - upward and downward		

RADIOGRAPHER _____ DATE: _____

Rev. 11/24/17

CLINICAL PROFICIENCY CHECKLIST- GENERAL PATIENT CARE

STUDENT: _____

	Date Completed
CPR Certification	
Vital Signs (Blood Pressure, Pulse, Respirations, Temperature Pulse Oximetry)	
Sterile and Medical Aseptic Technique	
Transfer of Patient	
Care of Patient Medical Equipment (eg. Oxygen tank, IV tubing)	
Venipuncture	

OXYGEN ADMINISTRATION EVALUATION

STUDENT: _____ **GRADE:** _____

EVALUATOR: _____ **DATE:** _____

Given a simulated situation, the student must be able to perform oxygen administration on a patient during a radiographic exam. A satisfactory score of 90 percent or higher is required.

Patient Prep

Yes No

- | | | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Greet the patient, identify yourself, and state your purpose. |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Confirm patient identity on his/her wrist band. |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Tell patient that he/she will be moved to the radiographic room for their exam. Explain that you are going to set up an oxygen tank for the transport. |

Equipment Use

- | | | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Monitor the patient's breathing, pulse, and appearance. Report any abnormal signs to nursing personnel. |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Slowly turn on the tank to make sure it is full enough for transport (at least 500 psi). Use the tank wrench to turn the valve stem and turn in a Counter-clockwise direction. |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Check the rate of oxygen flow to the patient. |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. Turn on and adjust the source you will be transferring the patient to before removing the patient from his/her current source of oxygen. |
| <input type="checkbox"/> | <input type="checkbox"/> | 5. Remove the patient from his/her oxygen current source and place her on the new oxygen source as quickly as possible. |
| <input type="checkbox"/> | <input type="checkbox"/> | 6. Shut off the source the patient is not using. |
| <input type="checkbox"/> | <input type="checkbox"/> | 7. Make sure the patient's oxygen delivery system is operating normally and tubing to patient is not obstructed. |
| <input type="checkbox"/> | <input type="checkbox"/> | 8. Monitor the patient's breathing, pulse, and appearance once changeover has been completed. Report any abnormal signs. |

Comments:

Evaluator name: _____

Student Signature: _____

COLUMBUS TECHNICAL COLLEGE – RADIOLOGIC TECHNOLOGY PROGRAM

Columbus Technical College – Radiologic Technology Program Proficiency Patient Transfer Techniques

Student Name: _____ **Date:** _____

Objective: to demonstrate proper wheelchair and cart transfer techniques

Procedure: on completion of this laboratory activity, the student will be able to:

Standby Assist Wheelchair Transfer

YES

NO

1. Position the wheelchair at a 45 degree angle to the table. ☐
2. Move the wheelchair footrests out of the way and be sure that the wheelchair is locked. ☐
3. Instruct the patient to sit on the edge of the wheelchair seat. ☐
4. Instruct the patient to push down on the arms of the chair of assist in rising and then stand up slowly ☐
5. Direct the patient to reach out and hold onto the table with the hand closest to the table and then turn slowly until he or she feels the table behind him or her. ☐
6. Instruct the patient to hold the table with both hands and then sit down. ☐

Assisted Standing Pivot Wheelchair Transfer

1. Position the wheel chair at a 45 degree angle to the table with the patient's strongest side closest to the table. If the Patient has loose-fitting clothes, place a transfer belt around the patient's waist. ☐
2. Move the wheelchair footrests out of the way and be sure that the wheelchair is locked. ☐
3. Direct the patient to sit on the edge of the wheelchair seat, providing assistance as needed. ☐
4. Instruct the patient to push down on the arms of the wheelchair to assist in rising. ☐
5. Bend at the knees, keeping the back stationary, and grasp the transfer belt with both hands. Block the patient's feet and knees to provide stability, especially for paraplegic and hemiplegic patients. ☐
6. Assist the patient in rising to a standing position. ☐
7. Ask the patient whether he or she is feeling all right. If the patient reports any feelings of dizziness or exhibits any of the other signs of orthostatic hypotension, let him or her stand for a moment until the feeling subsides. ☐

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8. Pivot the patient toward the table until the patient can feel the table against the back of the thighs. ☐
9. Ask the patient to support himself or herself on the table with both hands and sit down, assisting as necessary. ☐

Two-Person Wheelchair Lift

1. Plan for the lift by locating an assistant who will lift the patient's feet as you lift the patient's torso. ☐
2. Lock the wheelchair, remove the armrests, swing away or remove the leg rests, and direct the patient to cross his or her arms over the chest. ☐
3. Stand behind the patient, reach under the patient's axillae, and grasp the patient's crossed forearms. Direct the assistant to squat in front of the patient and cradle the patient's thighs in one hand and the clavicles in the other hand. ☐
4. On command, lift the patient to clear the wheelchair and move the patient as a unit to the desired place. ☐

Cart Transfer with a Moving Device

1. Move the cart alongside the table, preferably on the patient's strong or less affected side. Place it as close to the table as possible, and then secure it by depressing the wheel locks. In addition, place sandbags or other devices on the floor to block the wheels satisfactorily. ☐
2. Place the patient at an oblique angle away from the table while the moving device is placed to the midpoint of the back. ☐
3. Return the patient to a supine position so that he or she is halfway onto the moving device. ☐
4. Grab the draw sheet, and use it to move the patient slowly onto the table. ☐
5. Remove the moving device, turning the patient obliquely if necessary. ☐

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Cart Transfer Without a Moving Device

1. Move the cart alongside the table, preferably on the patient's strong or less affected side. Place it as close to the table as possible, and then secure it by depressing the wheel locks. In addition, place sandbags or other devices on the floor to block wheels satisfactorily. ☐
2. Begin by rolling up the draw sheet on both sides of the patient. Be sure that the draw sheet is completely under the patient and straightened before the transfer ☐
3. Support the patient's head and upper body from the far side of the radiographic table. Direct a second assistant to support the patient's pelvic girdle from the cart side and a third assistant to support the patient's legs from the table side. ☐
4. Cross the patient's arms over the chest to avoid injury or interfering with a smooth transfer. ☐
5. Direct the second assistant supporting the pelvic girdle to stand on the opposite side of the cart, and make sure that the cart does not move away from the table during the transfer. ☐
6. On command, grasp the rolled up draw sheet and slowly pull the patient to the edge of the cart. On a second command, slowly lift and pull the patient onto the table. ☐

Comments:

Evaluator's Signature:

Student's Signature:

COLUMBUS TECHNICAL COLLEGE – RADIOLOGIC TECHNOLOGY PROGRAM

Columbus Technical College Proficiency- Monitoring Patient Vital Signs

Student Name: _____ Date: _____

Objective: to measure a patient's vital signs of temperature, pulse and pulse oximetry, respiration, and blood pressure.

Equipment:

- Thermometer
- Blood pressure kit

Procedure: On completion of this lab activity, the student will be able to:

Temperature – Oral Method

YES NO

- _____ 1. Place the oral thermometer under the patient's tongue.
- _____ 2. Ensure that the thermometer is kept in place until a stable reading is obtained.
- _____ 3. Read the oral thermometer and record the reading.

Respiration

- _____ 1. Measure a patient's respiration by observing the patient's chest or abdomen for a 60 second period.
- _____ 2. Record the number of respirations per minute.

Pulse and Pulse Oximetry

- _____ 1. Measure a patient's pulse rate at the radial artery near the wrist for 60 second period.
- _____ 2. Record the patients pulse rate per minute.
- _____ 3. Measure a patient's oxygen level with pulse oximetry monitor.

Blood Pressure

- _____ 1. Obtain a sphygmomanometer and stethoscope.
- _____ 2. Place the cuff of the sphygmomanometer on the patient's upper arm midway between the elbow and shoulder.
- _____ 3. Inflate the cuff above the systolic pressure to stop blood flow to the arm.
- _____ 4. With the stethoscope placed over the brachial artery in the antecubital fossa of the elbow, slowly release the cuff of the sphygmomanometer.
- _____ 5. When the first sound of blood flow is heard through the stethoscope, record the systolic pressure reading.
- _____ 6. When the sound of blood flowing through the arm ceases, record the diastolic pressure reading.

Comments:

Evaluator's Signature: _____

Student's Signature: _____

COLUMBUS TECHNICAL COLLEGE – RADIOLOGIC TECHNOLOGY PROGRAM

Columbus Technical College Proficiency- Proper Handwashing Technique

Objective: To demonstrate proper handwashing technique.

Equipment:

- Sink
- Soap
- Toweling

Procedure: On completion of this lab activity, the student will be able to:

YES	NO	
_____	_____	1. Approach the sink. Consider it to be contaminated. Avoid contact with clothing. Use foot or knee levels when available. If not, use toweling to handle all controls. Adjust water flow to avoid splashing. Adjust water temperature to comfort.
_____	_____	2. Wet hands thoroughly with water, keeping the hands lower than the elbows.
_____	_____	3. Apply soap. Soap should be available in liquid form and can be applied by use of foot or knee levers.
_____	_____	4. Use a firm, vigorous, rotary motion, beginning at the wrist and working toward the fingertips. Rub the palms, back of the hands, between the fingers, and under the nails.
_____	_____	5. Rinse and allow water to run down over hands.
_____	_____	6. Repeat the entire process to cleanse from the elbow to the fingertips.
_____	_____	7. Turn off the water. Use toweling on handles if foot or knee levers are not available.
_____	_____	8. Dry from the elbow to the fingertips, never returning to an area.

Comments:

Evaluator's signature: _____

Student's signature: _____

COLUMBUS TECHNICAL COLLEGE – RADIOLOGIC TECHNOLOGY PROGRAM

Columbus Technical College Proficiency- Sterile Gloving Technique

Student Name: _____ Date: _____

Objective: To demonstrate proper sterile technique for the closed and open methods of self-gloving and for gloving another person.

Equipment: Surgical gloves; Surgical gown

Procedure: On completion of this lab activity, the student will be able to:

Self-Gloving: Closed Method

- | YES | NO | |
|-------|-------|---|
| _____ | _____ | 1. Approach the sterile field with caution. |
| _____ | _____ | 2. Secure the first glove, keeping the fingers within the cuff of the gown, if a gown is being used. |
| _____ | _____ | 3. Align the glove on the palm of the hand that will be gloved first with the thumb side of the glove toward your palm and the fingertips toward the elbow. |
| _____ | _____ | 4. Pull the cuff of the glove over the cuff of the gown. |
| _____ | _____ | 5. Unfold the cuff of the glove to completely cover the cuff of the gown. |
| _____ | _____ | 6. Grasp the glove and the gown at the wrist level. |
| _____ | _____ | 7. Work the fingers into the glove as the glove is pulled into position. |
| _____ | _____ | 8. Secure the second glove and apply using the same technique. |
| _____ | _____ | 9. Adjust the fingers until comfortable. |

Self-Gloving: Open Method

- | | | |
|-------|-------|--|
| _____ | _____ | 1. With the hands pushed through the sleeves of the sterile gown, pick up the cuff of the dominant hand glove with the nondominant hand, being sure not to touch the outside surface of the glove. |
| _____ | _____ | 2. Slip the dominant hand into the glove and pull the glove on by the nondominant hand. |
| _____ | _____ | 3. Pick up the other glove by reaching under the cuff with the gloved (and now sterile) dominant hand, being sure to touch only the outside surface of the glove with the sterile gloved hand. |
| _____ | _____ | 4. Pull the glove onto the nondominant hand without touching the inside surface of the glove (which is actually the outside surface of the folded cuff). |

COLUMBUS TECHNICAL COLLEGE – RADIOLOGIC TECHNOLOGY PROGRAM

Gloving Another

- _____ 1. After gloving using sterile technique, open the sterile package and pick up the gloves.
- _____ 2. After informing the person being gloved which hand to use, grasp the cuff and pull sideways to open the glove, with the thumb facing the hand to be gloved. Be sure to have an extremely good grasp on the cuff, as considerable force will be exerted when the hand is pushed down into the tight glove.
- _____ 3. Direct the person being gloved to keep the thumb away from the glove to avoid possible contact, and then put the hand in the glove using a downward motion.
- _____ 4. Repeat the process for the other hand.

Comments: _____

Evaluator's Signature: _____

Student's Signature: _____

