Washtenaw Community College | RADIOGRAPHY

PROGRAM HANDBOOK
2024-2025

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The purpose of the Washtenaw Community College (WCC) Radiography Student Handbook is to provide students with important information specific to the Radiography Program. This handbook supplements the WCC College Catalog and WCC College Student Handbook.

The radiography faculty reserves the right to change any policies and procedures as necessary. Written notification to currently enrolled students will be provided for any changes.

Acknowledgments
A sincere thank you goes to the Clinical Preceptors for their hard work and dedication to the student body and radiography program. We would also like to thank these individuals for their suggestions and critique of the handbook. Their input helped fill the gaps and answer questions that can only increase the efficiency and consistency of clinical education. A special thank you to Robert Nelson and Connie Foster for providing support and seasoned expertise. Your advice was well taken! We would also like to thank the radiographers and supporting staff who contributed their time and skills in making the clinical experience productive for our students. The program faculty and student body appreciate your efforts in making our program a success. Thank you!

Accreditation
Institutional Accreditation
Washtenaw Community College is accredited by The Higher Learning Commission 230 South LaSalle Street, Suite 7-500
Chicago, IL 60604
Phone: 800.621.7440
Email: http://www.hlcommission.org/

Programmatic Accreditation
Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Drive, Suite 2850
Chicago, IL 60606-3182
Phone: 312.704.5300
Email: mail@jrcert.org

JRCERT Standards
The program is required to comply with the Joint Review Committee on Education in Radiologic Technology (JRCERT) Standards for Accredited Educational Programs in Radiologic Sciences. The JRCERT Standards 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. There are six (6) standards:

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

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

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

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

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

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

A copy of the complete JRCERT Standards can be obtained from the program director and is also available on the JRCERT website at www.jrcert.org.

Non-compliance with JRCERT Standards
Students have the right to submit allegations against a JRCERT-accredited program if there is a reason to believe that the program is in non-compliance with the JRCERT accreditation standards or that conditions at the program appear to jeopardize the quality of instruction or the general welfare of its students.

An investigation into allegations of non-compliance addresses only the program's compliance with accreditation standards and will not affect the status of any individual student. The following procedures have been developed to resolve issues or concerns regarding compliance with the JRCERT Standards for an Accredited Educational Program in Radiography:

1. Complaints of non-compliance with JRCERT standards should first be submitted in writing to the Radiography Program Director. The complaint should state the specific

standard(s) and provide a detailed explanation of the non-compliance issues.
2. The Radiography Program Director will investigate the allegation of non-compliance and respond to the complaint within 10 business days (excluding weekends and holidays).
3. If the complainant is dissatisfied with the Radiography Program Director's resolution, he or she may proceed to resolve the complaint through the program/institutional grievance procedure.
4. If the student is unable to resolve the complaint through the program/institutional grievance procedure or believes that the concerns have not been properly addressed, the student may submit allegations of non-compliance directly to the JRCERT.
The Program will maintain a record of any complaints of violation and the resolution of the complaint.

General Information - College
Nondiscrimination Policy
Washtenaw Community College does not discriminate based on religion, race, color, national origin, age, sex, height, weight, marital status, disability, veteran status, or any other protected status as provided for and to the extent required by federal and state statutes, nor does the college discriminate based on sexual orientation, gender identity or gender expression. WCC is committed to compliance in all of its activities and services with the requirements of Title IX of the Educational Amendments of 1972, Public Act 453, Section 504 of the Rehabilitation Act of 1973, Title VII of the Civil Rights Act of 1964 as amended, Public Act 220, and the Americans with Disabilities Act of 1990.

Inquiries or complaints by students or employees regarding the College's nondiscrimination policies may be addressed to:

VP of Student & Academic Services & Title IX Coordinator
Linda Blakey
Room SC 247
Phone: (734) 973-3536
Email: lblakey@wccnet.edu

The Student Right to Know and Campus Security Act of 1990
The Student Right to Know and The Campus Awareness & Security Act of 1990 requires institutions to disclose information about graduation rates, crime statistics, and security information to current and prospective students. WCC is in full compliance and provides information annually through various means, including college publications, wccnet.edu, or email. Inquiries concerning the Student Right to Know and Campus Security Act should be directed to:Deanofstudents@wccnet.edu

VP of Student Services
Clarence Jennings Jr.
Room SC 251
Phone: (734) 677-5477
Email: cjennings2@wccnet.edu

Family Education Rights and Privacy Act (FERPA)
The Family Educational Rights and Privacy Act (FERPA) is a federal law that governs the privacy of student educational records, access to those records, and disclosure of information from them. WCC is committed to making sure that student rights under FERPA are protected. Questions concerning FERPA can be addressed by visiting the Student Welcome Center, Student Center Building, 2nd floor, or emailing studrec@wccnet.edu

Public Safety Department
The Public Safety Department is the campus authority responsible for ensuring the safety and security of the College community, buildings, and property. Its officers enforce campus safety and security regulations, including parking regulations. In case of emergency, Campus Resource Officers are responsible for implementing emergency procedures at Washtenaw Community College in coordination with local law enforcement agencies as needed. Copies of the emergency procedures and equipment are available on the College's webpage at Public Safety

The Office of Public Safety is located on the second floor of the Campus Parking Structure on the northeast side facing the Occupational Education (OE) Building. The office is staffed 24 hours a day, 365 days a year. Public Safety officers are on campus during evening classes and may be available to escort students to cars at the end of evening classes. Students requiring an escort should contact the Office of Public Safety using available emergency and house phones. Students may call the Office of Public Safety at (734) 973-3411 (or 3411 from a College house phone) to report any suspicious activity or safety concern.

Emergency Warnings and Notification of College Closing
Bad weather, utility outages, or other circumstances may cause WCC to cancel classes or delay the start of classes. WCC has implemented an emergency notification service that sends messages via email, text message, phone call, or TTY/TDD device for the hearing impaired. To sign up for the WCC Alert Service log in to MyWCC and choose "WCC Alert – Emergency Notification System."

You also can learn if WCC is closed by checking the WCC homepage at wccnet.edu. Local radio and television stations will also provide information.

Drug and Alcohol Policy
Except for certain circumstances, Washtenaw Community College does not permit the possession, consumption, use, or sale of alcoholic beverages in any form on campus. The unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance on Campus property is strictly prohibited. Refer to the Student Handbook and Staff Manual for the full policy regarding the use of drugs and alcohol on campus. These policies detail disciplinary actions that may be taken by Washtenaw Community College against violators of this policy. The Board of Trustees website contains the official Drug-Free Workplace policy as well as the Alcoholic Beverages on College Property, Use, and Possession policy.

Scholarships, Grants, and Financial Aid

Scholarships, grants, and other forms of financial assistance are available to aid students in completing the Radiography Program. A student may obtain information regarding scholarships, grants, and financial aid from the following areas:

- Student Resource Center (734) 677-5105, SC 206 http://src.wccnet.edu/
- Financial Aid Office, 2nd floor of Student Center Building, Financial Aid

Student Advising/Counseling

Faculty Advisors

All full-time radiography faculty are available to advise and counsel radiography students. Based on students' needs and requests, faculty advisors monitor academic achievement and provide guidance and assistance in meeting academic requirements. They also serve as mentors, assist students with study and coping skills, and write letters of recommendation.

Health Science Division Advisors

The Health Science Division has 3 academic counselors available to advise students enrolled in the health sciences programs: Contact: Brittany Tripp at brtrippp@wccnet.edu, Michael Brown mbrown102@wccnet.edu, or Whitney Lee whlee@wccnet.edu

Personal Counseling

Licensed professional counselors are available to assist and support students with their academic goals, by offering personal counseling and promoting mental health awareness. Monday through Friday by appointment. To make an appointment call 734-677-5223.

General Information- Radiography Program

Radiography Program Description

This program prepares students for a career in diagnostic radiology as a radiographer. A radiographer is a technologist who produces images of the human body to aid physicians in the diagnosis and treatment of injuries and diseases. The program curriculum includes a series of courses offered in conjunction with individualized laboratory work and extensive clinical experience in local hospitals. Upon completion of the program, the student will receive an Associate in Applied Science Degree in Radiography and is eligible to take the national registry examination administered by the American Registry of Radiologic Technologists (ARRT). Radiographers work in a variety of settings including hospitals, clinics, doctors' offices, and mobile x-ray companies.

Program Philosophy

"We believe that education is an ongoing and multifaceted process of change and growth for each student. Education is viewed as a give-and-take learning experience between the student and the instructor. The program faculty takes into account that students learn in different ways and at different rates. As a consequence, the curriculum and methods of instruction are constructed to accommodate individual differences as much as practical."

Robert Nelson, MS, R.T.(R) RDMS Department Chair

Radiography Program 1967 to 1994

Radiography Program Mission Statement

The mission of the Radiography Program is to provide students with a high-quality, well-rounded educational experience that results in graduates who possess the knowledge, skills, and abilities to enter the field of diagnostic imaging as entry-level radiographers. Graduates of the Washtenaw Community College Radiography Program will demonstrate the necessary skills to integrate theoretical knowledge and essential clinical skills to perform radiologic procedures and provide exemplary patient care in a variety of healthcare settings with diverse patient populations.

Program Goals and Student Learning Outcomes

The mission of the Radiography Program is sustained by the achievement of the following goals and student learning outcomes:

Goal 1: **Clinical Competency: Students will demonstrate proficiency in technical and clinical skills.**

Student Learning Outcomes:

1. Students will perform diagnostic radiographic procedures.
2. Students will demonstrate the ability to perform basic patient care assessment skills.

Goal 2: **Critical Thinking: Students will demonstrate critical thinking and problem-solving skills.**

Student Learning Outcomes:

1. Students will calculate the correct exposure factors.
2. Students will solve problems in the clinical setting.

Goal 3: **Communication Skills: Students will demonstrate the ability to effectively communicate orally and in writing.**

Student Learning Outcomes:

1. Students will use effective oral communication skills in the clinical setting.
2. Students will practice writing skills.

Goal 4: **Professional and Ethical Principles: Students will demonstrate the ability to analyze and address ethical and medical issues in patient care while exhibiting professionalism in the clinical setting.**

Student Learning Outcomes:

1. Students will recognize the ethical and medical issues in patient care.
2. Students will exhibit professional behaviors in the clinical setting.

Radiography Program Assessment and Reporting

To engage in an ongoing quest for quality, the Radiography Program maintains a comprehensive system of planning and assessment. A variety of assessment methods are

used, and the results are used to make changes to the curriculum and teaching to improve student learning. Students will receive updated assessment data reports during the spring semesters in clinical courses RAD 150 and RAD 240. **(Appendix A)**

Program Effectiveness Outcomes

1. The 5-year average pass rate for the ARRT credentialing examination is not less than 75% on the first attempt.
2. The 5-year average job placement rate of graduates actively seeking employment is not less than 75% within 12 months of graduation.
3. Students admitted to the program will successfully complete the program within the 2-year sequence.
4. Graduates will indicate that the program adequately prepares them for entry-level positions.
5. Employers will indicate that the program graduates are adequately prepared for entry-level positions.

The Radiography Program at Washtenaw Community College is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). In compliance with the JRCERT Standards for an Accredited Educational Program in Radiography, the Program's Effectiveness Data (credentialing examination pass rate, job placement rate, and program completion rate) must be made available to prospective students and the general public. Students will receive updated Program Effectiveness Data reports during the fall semesters in clinical courses RAD 110 and RAD 217. **(Appendix B)**

The JRCERT Program Effectiveness Data for all accredited radiography programs can be obtained by visiting the JRCERT website at https://portal.jrcertaccreditation.org/accredited-educational-programs/search

Statement of Professional Behavior

For many working in the imaging sciences, professional behavior is something that is not easily definable, but we know it when we see it. Students entering into the field of medical imaging may witness a variety of behaviors exhibited by those who are responsible for their training, some of which exemplify the best of the profession and some the worst. Professional behavior may also be regarded as how one considers how institutional or program policies apply to an individual such as those concerning attendance, tardiness, completing assigned tasks, and supervision. Although all students enrolled at Washtenaw Community College are held to the college's policy on students' rights and responsibilities (see Board of Trustees Policy 4095: (Student Rights, Responsibilities, and Conduct Code), the purpose of the following statement is to provide advice and guidance to students enrolled in the Washtenaw Community College Radiography Program as to what constitutes professional behavior so that they can recognize what in their behaviors and the behaviors of others are considered professional and what is not. Each component listed in this document sets out the underpinning values and principles to promote, maintain, and disseminate the highest standards of behavior to enhance the good standing and reputation of the profession.

- Radiography Students shall conduct themselves in a manner compatible with the dignity and ethical standards of the profession they are entering, and in compliance with this should follow the ARRT Code of Ethics for the Profession of Radiologic Technology, the institutional policies of their clinical site, and the program policies of the WCC Radiography Program.
- Radiography Students shall provide care and services with consideration of human dignity and the needs of the patient, unrestricted by consideration of age, sex, race, creed, social or economic status, handicap, personal attributes, or the nature of the health problem.
- Radiography Students shall make every effort to protect all patients from unnecessary radiation.
- Radiography Students should exercise and accept responsibility for their actions in the performance of the educational activities needed to build their clinical and didactic knowledge base.
- Radiography Students shall judiciously protect the patient's right to privacy and shall maintain all patient information in the strictest confidence.
- Radiography Students shall apply only methods of technology that they have received training in and which are founded upon a scientific basis and not employ those methods that violate this principle.
- Radiography Students shall not diagnose but, in recognition of their responsibility to the patient, shall provide other healthcare providers with all information they have relative to radiologic diagnosis or care management.
- Radiography Students shall be responsible for reporting unethical conduct and illegal professional activities to the appropriate authorities.
- Radiography Students should continually strive to improve their knowledge and skills by participating in all clinical and didactic activities that further their education.
- Radiography Students should protect the public from misinformation and misrepresentation.
- Radiography Students should respect the authority of those responsible for their training.
- *Adapted from the “Principles of Professional Conduct for Radiologic Technologists,” American Registry of Radiologic Technologists.

Code of Ethics

CODE OF ETHICS FOR THE PROFESSION OF RADIOLOGIC TECHNOLOGY

STANDARDS OF ETHICS OF THE ARRT

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

Principle 1
The Registered Technologist acts professionally, responds to patient needs, and supports colleagues and associates in providing quality patient care.

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

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

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

Principle 5
The Registered Technologist assesses situations; exercises care, discretion, and judgment; assumes responsibility for professional decisions; and acts in the best interest of the patient.
Principle 6
The Registered Technologist acts as an agent through observation and communication to obtain pertinent information for the physician to aid in the diagnosis and treatment of the patient and recognizes that interpretation and diagnosis are outside the scope of practice for the profession.

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

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

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

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

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

Technical Standards (See Appendix M)

Academic Calendar

The Radiography program follows the academic calendar established for the College. The academic calendar is published on the College's webpage under Academic Dates: http://www.wccnet.edu/academics/dates/.

Semesters

The College has three semesters: Fall, Winter, and Spring/Summer. Students are admitted to the Radiography program in the Spring/Summer semester and must complete seven consecutive semesters of didactic and clinical instruction: Spring/Summer, Fall, Winter, Spring/Summer, Fall, Winter, Spring/Summer.

College Holidays/Breaks

The Radiography program follows the academic calendar established for the College for its breaks and holidays. The academic calendar is published on the College's webpage under Academic Dates: http://www.wccnet.edu/academics/dates/.

Course Schedule

Each semester the schedule for the radiography courses is listed in the Credit Class Schedule posted on the College's webpage at http://www.wccnet.edu/academics/schedule/.

Insurance

Student Health Insurance

Students admitted to the Radiography Program are required to have and maintain personal health insurance coverage throughout the program. Students must submit proof of coverage to ViewPoint Screening. If the student's name does not appear on the card, a letter of eligibility is required to verify coverage as a dependent. Students are solely responsible for their medical bills while enrolled in the program. No student will be permitted to report to his or her assigned clinical site without proper health coverage.

Student Liability Insurance

Washtenaw Community College will provide incidental malpractice insurance protection for students and program faculty when on assignment in clinical affiliates. The malpractice

insurance will cover the student only on approved clinical assignments and when being supervised by a registered radiologic technologist. Students who participate in unapproved clinical activities are not covered by this policy and may be subject to disciplinary action.

Transportation and Housing Policy

Most clinical sites are within 60 miles of the WCC campus. However, clinical sites offering appropriate learning experiences may be located geographically distant from the student's home. The Radiography faculty makes every effort not to create hardship for students, but students must be willing to go where the best available educational opportunities exist.

Students are responsible for their own housing, support, and reliable transportation during all clinical education experiences.

Health History Forms Policy

All students in the Radiography Program are required to complete, with physician signatures, the health history forms. These forms must be completed before the orientation which is typically held in early April before the program begins and must remain current while in the Radiography Program. These forms include a health Examination performed by a physician or Nurse Practitioner; TB screening, Immunization Verification, Hepatitis (Hep) B questionnaire, general Report of Medical History, review of Technical Standards, and any additional forms as needed or requested by the clinical affiliates. Students will upload completed documents to the designated Health Portal.

Procedures

- Students will receive access to forms and instructions when accepted to the Radiography Program
- Students are expected to schedule appropriate appointments promptly within the parameters given by the program.
- Students are to submit all completed forms no later than the due date given in the acceptance letter.
- Students must notify the Radiography Program, in writing, of any immunizations (TB, Hep B) that are in progress with the expected completion date/timeframe.
- Students are required to have health insurance before entering the program and maintain health insurance until all clinical education experiences are completed. All medical expenses are the responsibility of the student.
- Failure to submit completed paperwork to the designated Health portal by the deadline will result in the inability to participate in the Radiography Program.
- Some clinical facilities require that students undergo additional medical tests (TB test, have titers drawn, or complete another physical) and/or criminal background checks. This could be at the student's own expense.
- Failure to submit completed paperwork to the designated Health portal by the deadline will result in the inability to participate in the Radiography Program.

Criminal Background Check Policy

All students entering the Radiography program will authorize the designated agency to

perform a criminal background check as part of the WCC Admission process and requirements. The criminal background check will be conducted by the designated external agency and must be completed
before the orientation which is conducted in late March or early April in the year in which the program begins.

- If the student receives a “positive” from the criminal background check, the student’s admission will not be processed until the student has “cleared” the background check and the American Registry of Radiologic Technologists Pre-Application Review Process is completed, and clearance from the ARRT Ethics committee is obtained.

- It is the student’s responsibility to follow-up on and address any discrepancies. Acceptance into and graduation from the Radiography program does not guarantee that the State licensure board will grant licensure.

Misdemeanor or Felony
A student who is charged with a misdemeanor or felony while enrolled as a radiography student is obligated to report this event to the Program Director immediately.

Drug-Free Policy
Washtenaw Community College and its affiliated clinical education sites are drug-free facilities. Students and faculty are prohibited from the unlawful manufacture, distribution, dispensing, possession, or use of any narcotic drug, amphetamine, barbiturate, marijuana, alcohol, or any controlled substance while on campus or at a clinical education site.

Federal laws criminalizing the manufacture, sale, and use of marijuana remain in place, as do federal regulations that require institutions of higher education to maintain drug-free campuses to qualify to receive federal financial aid. As an agency that accepts federal funding, the College must also comply with the federal Drug-Free Workplace law. This law, which supersedes state statutes, still considers marijuana a banned substance. Accordingly, marijuana will continue to be prohibited on all College property and clinical affiliates at all times.

Failure to comply with the drug-free policy will result in immediate referral to the local police department for prosecution. Students whose actions significantly endanger patient safety (which includes but is not limited to, alcohol/drug usage or sexual misconduct) will be dismissed from the program immediately.

Students may be subject to a drug screen at the discretion of their clinical site. If the clinical site finds a student’s drug screen to be unsatisfactory, the student may be dismissed from the program.

Smoking
Smoking (including tobacco cigarettes, pipes, cigars, electronic cigarettes, vapor cigarettes, herbal cigarettes, or any device emitting smoke or vapor) is prohibited in any area (indoor

and outdoor) of the WCC campus and at clinical education sites. Smoking marijuana (including for medicinal purposes) is also prohibited in any area of campus and at clinical education sites. This policy applies to parking lots, walkways, sidewalks, sports venues, and vehicles parked or operated on College property.

Technology Needs

A computer with a webcam (or a separate webcam), microphone, and speakers. You also must have a way to record yourself for assignments. A smartphone is a great way to record, otherwise, you need to have a device that can do this. Also, you must have reliable internet access. While we know issues with connection happen once in a while, experiencing problems with your internet routinely, will not allow you to be successful. Also, the Internet speed must be at least 2 Mbps download and upload for Examity use. All course materials will be available through the course BlackBoard site. MS Word is required for any document submission. The use of a mobile device (such as a smartphone or tablet) is not recommended when using BlackBoard regularly as you are not able to see the entire site and material may be missed.

Student Email

All students are required to use their WCC student email account. Students are responsible for information transmitted to them via their WCC student e-mail from the College and the Radiography faculty. Information on WCC student email accounts can be found at WCC Gateway for Students.

Graduation Requirements

Students pursuing an associate degree are required to meet the general education requirements in eight areas: Writing, Speech, Mathematics, Natural Science, Social, and Behavior Science, Arts and Humanities, Critical Thinking, and Computer and Information Literacy.

Students who have earned a bachelor's degree or higher from an accredited U.S. college or university may request a waiver of the general education requirements from Student Records located on the 2nd floor of the Student Center Building.

Students must complete all general education course requirements and radiography courses with a cumulative grade point average (GPA) of 2.0 (C) to qualify for the Associate in Applied Science degree.

Degree Awarded

Upon completion of all required program general education and radiography courses (didactic and clinical), the student will be awarded an Associate Degree in Applied Science degree and will be eligible to sit for the American Registry of Radiologic Technologists (ARRT) certification examination for radiography.

Articulation Agreements

WCC has articulation agreements with four-year institutions, which enables radiography students to transfer credits from the Radiography Program into a specific bachelor's degree

program at the other institution. Contact the radiography program director or the health sciences division advisor for a current list of articulation agreements.

Advanced Placement Program

Transfer applicants requesting Advanced Placement will be reviewed and if accepted placed into the WCC radiography program on a space-available basis. The Program Director and Clinical Coordinator will determine the appropriate placement of the transferring applicant into the radiography program. To be eligible for this program, students must show documentation of completion of a U.S. military or JRCERT-accredited program in Radiography and current clinical radiography experience. Advanced placement students must follow the policies and procedures outlined in the Radiography Program Handbook and will be under the supervision and guidance of the Clinical Coordinator. Failure of any course in the program will prevent the student from continuing until that course is available the following year. Students will be required to sign a contract for re-entering the program. If the student does not fulfill the terms of the contract, there will be no chance for re-admission.

Transfer Students

Credits are typically eligible for transfer if they are received from an accredited institution and are in a subject area that falls within the general education requirements for the Radiography degree. Only courses with a grade of 2.0 or higher on a 4.0 scale will be accepted in transfer. Students planning to transfer to WCC must have official transcripts mailed directly to the Washtenaw Community College Student Records Office from an issuing institution or sealed if issued to the student. For more information on transferring credits go to Transfer Resources

Transferring Radiography Courses

Radiography students requesting a transfer to the WCC Radiography Program must submit the following documentation to the Radiography Program Director:

- A GPA of no less than 2.0 in all courses related to the Radiography degree with a minimum of a "C" in each course.
- A copy of the radiography clinical syllabi, evaluations, and completed competency exams.
- A copy of a current CPR card.
- A copy of current health records and immunizations.

The transfer student will be subject to all WCC Radiography Program policies and procedures and must meet all program completion/graduation requirements.

ARRT Radiography Certification and Registration

Candidates for ARRT certification and registration must meet basic education, ethics, and examination requirements to become eligible.

ARRT Education Requirement

Candidates for ARRT certification and registration must have, within the last three years, completed an accredited radiography program and have earned an academic degree.

ARRT Ethics Requirements

All candidates for certification must comply with the Code of Ethics contained in the ARRT Standards of Ethics. The Code of Ethics are standard of acceptable professional conduct for all registered technologists and candidates, intended to promote the protection, safety, and comfort of patients. The ARRT may deny applications for certification if the applicant has been found guilty of dishonesty,
fraud, deceit, acts which deceive the public, felony, child abuse, sex offender crimes; acts involving narcotics, dangerous drugs or devices, assault and/or battery, and other crimes.

Individuals who apply for a primary pathway to certification must answer three ethics-related questions on the application form. The questions address convictions, court-martials, disciplinary action by regulatory or other certification boards, and educational honor code violations. If you have committed a misdemeanor or felony offense, including convictions or charges resulting in a plea of guilty, a plea of nolo contendere (no contest), withheld or deferred adjudication, suspended or stay of sentence, pre-trial diversion activity, or military court-martial, it is your responsibility and not the WCC Radiography Program to contact the American Registry of Radiologic Technologists (ARRT) for an Ethics Pre-Application Review of your status to be allowed to take your registry exam.

In addition, if you have ever had a license revoked or been suspended or expelled from a radiography education program before your admission to the WCC Radiography Program, it is your responsibility and not the WCC Radiography Program to contact the ARRT for an Ethics Pre-Application Review of your status to be allowed to take your registry exam.

More information regarding this can be found on the ARRT website ARRT under the “Ethics” subsection or call the ARRT at 651-687-0048, ext. 8580.

The decision as to your eligibility is entirely up to the ARRT, and the Washtenaw Community College Radiography Program has no influence or control over the ARRT’s judgments in these matters.

ARRT Examination Requirements

Candidates for ARRT certification and registration must first fulfill the education and ethics requirements. They must then pass the American Registry of Radiologic Technologists (ARRT) certification exam in radiography. Upon achieving a passing score, graduates earn certification and registration as radiologic technologists, allowing them to use the designation RT(R).

Students are responsible for any examination fees, travel expenses, or other accommodations required to complete the ARRT certification exam for radiography.

Annual Renewal of ARRT Certification and Registration

Once certified and registered, registered radiologic technologists must renew their certification and registration each year to maintain the credential. To maintain your

credentials, you must agree to comply with the ARRT Rules and Regulations and ARRT Standards of Ethics each year, complete 24 hours of continuing education in two years, and complete the Continuing Qualification Requirements (CQR) every 10 years.

Advisory Board

The Advisory Board reviews advises, and recommends ways for the Radiography Program to best meet the needs of students, employers, and the community. The WCC Radiography Program Advisory Board consists of affiliate Clinical Preceptors and department supervisors. The WCC program director, clinical coordinator, and radiography faculty also serve on the Advisory Board. The Advisory Board makes recommendations concerning all aspects of the program, including, but not limited to, the curriculum (didactic and clinical), program mission statement and goals, annual program assessment plan and report, radiography laboratory facilities and equipment, and staffing. The Radiography Program Advisory Board meets twice annually.

Professional Organizations

The American Registry of Radiologic Technologists (ARRT)

The ARRT administers a comprehensive written examination to eligible graduates of educational programs in radiography, radiation therapy technology, and nuclear medicine technology, which are accredited by a mechanism acceptable to the ARRT. Graduates who pass the ARRT's examination are certified and registered in the appropriate discipline. www.arrt.org

The American Society of Radiologic Technologists (ASRT)

The ASRT is a professional membership organization representing the interests of radiographers, radiation therapy technologists, and nuclear medicine technologists according to the purpose and goals stated in its by-laws. The American Society sponsors numerous educational programs for all ranks of technologists with a wide range of professional and continuing education offerings. The ASRT developed and published the curriculum guide for educational programs in Radiologic Technology and provides for periodic review of curricula in Radiologic Technology. www.asrt.org

The Joint Review Committee on Education in Radiologic Technology (JRCERT)

The Joint Review Committee on Education in Radiologic Technology (JRCERT) promotes excellence in education and elevates the quality and safety of patient care through the accreditation of educational programs in radiography, radiation therapy, magnetic resonance, and medical dosimetry. The JRCERT is the only agency recognized by the United States Department of Education (USDE) and the Council for Higher Education Accreditation (CHEA), for the accreditation of traditional and distance delivery educational programs in radiography, radiation therapy, magnetic resonance, and medical dosimetry. https://www.jrcert.org

The Michigan Society of Radiologic Technologists (MSRT)

The MSRT not-for-profit member association for radiologic technologists and student technologists in Michigan. www.msrt.org

Student Radiography Club

The Radiography Club is a sponsored club at WCC. Although the club is open to all students regardless of age, sex, or academic major, typically its members are the current class of students accepted into the program. The goal of this organization is to offer educational and social activities related to allied health fields and promote awareness of radiology practices and career opportunities. Throughout the year, club members are involved with many fundraising activities to provide funding to support travel to educational conferences and defray the costs of the ARRT registry exam for each student. A radiography faculty member serves as the advisor and will work with the class officers to coordinate activities.

Radiography Program Curriculum

Disclaimer: The radiography program curriculum is subject to change at the discretion of WCC and/or the radiography faculty.

Course Sequence

Program Prerequisite Courses		(11 credits)
Course	Title	Credits
BIO 109	Essentials of Human Anatomy and Physiology	4
HSC 101	Healthcare Terminology	1
MTH 169	Intermediate Algebra or Any Math Level 4 or Higher Course	4
RAD 100	Introduction to Diagnostic Imaging	2

Semester 1 (Spring/Summer)		(8 credits)
Course	Title	Credits
ENG 111	Composition I	4
RAD 101	Methods in Patient Care	1
RAD 103	Medical Professionalism in Clinical Radiography	1
RAD 111	Fundamentals of Radiography	2

Semester 2 (Fall)		(12 credits)
Course	Title	Credits
COM 102	Fundamentals of Speaking	3
RAD 110	Clinical Education	2
RAD 112	Radiographic Positioning I	2
RAD 124	Principles of Radiographic Exposure	2

RAD 125	Radiographic Procedures and Related Anatomy	3

Semester 3 (Winter)		(9 credits)
Course	Title	Credits
SOC 100	Introduction to Sociology	3
RAD 120	Clinical Education	2
RAD 123	Radiographic Positioning II	2
RAD 215	Radiography of the Skull	2

Semester 4 (Spring/Summer)		(6 credits)
Course	Title	Credits
RAD 150	Clinical Education	3
RAD 218	Radiation Biology and Protection	3

Semester 5 (Fall)		(11 credits)
Course	Title	Credits
RAD 190	Physical Foundations of Radiography	3
RAD 217	Clinical Education	3
RAD 222	Pharmacology in Diagnostic Imaging	2
RAD 235	Pathology for Radiographers	3

Semester 6 (Winter)		(10 credits)
Course	Title	Credits
PHL 244	Ethical and Legal Issues in Health Care	3
RAD 223	Sectional Anatomy	2
RAD 225	Clinical Education	3
RAD 232	Digital Imaging in Radiography	2

Semester 7 (Spring/Summer)		(2 credits)
Course	Title	Credits

RAD 240	Clinical Education	2
	Minimum credits required for the program	69

*These courses must be taken before being admitted to the program.
**These courses may be taken before admission to the Radiography program.
(It is strongly advised that students complete the general education courses before entering the Radiography program.) Students can transfer or substitute equivalent general education courses required for the Radiography program. Contact the program advisor for approval.

Credit Hours
A credit hour is the amount of credit earned for a course based on the number of clock hours of instruction provided for a course per week.

Lecture Courses
A lecture credit hour is defined as one class hour (55 minutes) per week for 15 weeks. Typically, a three-credit-hour lecture course meets three clock hours per week for fifteen weeks for a total of 45 clock hours.

Blended Courses
Blended courses (also known as hybrid or mixed-mode courses) are classes where a portion of the traditional face-to-face instruction is replaced by web-based online learning. In the blended radiography courses, the contact hours are divided between the traditional classroom setting with an instructor and a structured online learning component outside of the classroom.

Laboratory Courses
A laboratory credit hour is defined as two class hours (55 minutes) per week for 15 weeks. Typically, one credit hour laboratory course meets two clock hours per week for fifteen weeks for a total of 30 clock hours.

Clinical Courses
A clinical credit hour is defined as 120 clinical clock hours per week for 15 weeks. Typically, a three-credit hour clinical course meets 24 clock hours per week for fifteen weeks for a total of 360 clock hours per semester.

Syllabus
A course syllabus will be given to each student for all didactic and clinical radiography courses. Students are responsible for knowing, understanding, and complying with the course schedule and the policies and procedures in the syllabi of all radiography courses in which they are enrolled.

Course Descriptions
RAD 100, Introduction to Diagnostic Imaging (2 credits - 30 lectures; 30 total contact hours)

Prerequisites: Academic Reading and Writing Levels of 6
This course is a prerequisite for admission to the radiography program. The purpose of this course is to provide an overview of diagnostic medical imaging modalities with an emphasis on the role of the radiologic technologist in the healthcare delivery system. Topics include the historical development of radiological sciences, professionalism, career development, organization of healthcare systems, introduction to radiographic equipment, procedures, radiation protection, and medicolegal issues.

RAD 101, Methods in Patient Care (1 credit - 15 lectures, 15 labs 30 total contact hours) Prerequisites: Academic Reading and Writing Levels of 6; Admission to the Radiography program This course is designed to teach the student how to therapeutically communicate with patients. Students will also learn to assess a patient's condition and how to provide quality patient care. This
course will include laboratory sessions that will teach the patient care skills that are within the scope of practice for a radiologist technologist, i.e. vital signs, blood pressure, venipuncture, airway management; patient transfer and immobilization techniques; infection control practices; aseptic and non-aseptic techniques.

RAD 103, Medical Professionalism in Clinical Radiography (1 credit -15 lecture, 15 total contact hours)
Prerequisites: Academic Reading and Writing Levels of 6; Admission to the Radiography program This course is an introduction to clinical education, clinical supervision, and professionalism in medical imaging settings. Topics include patient privacy and information confidentiality, professional behavior, student clinical skill performance and assessment, and the Clinical Preceptor-student dynamic.

RAD 110, Clinical Education (2 credits - 240 clinical 240 total contact hours) Prerequisites: Academic Reading and Writing Levels of 6; RAD 101 minimum grade "C-"
This course provides structured clinical experience in the application of knowledge and skill in positioning the upper extremity, chest, and abdomen; and demonstration of knowledge concerning professional ethics, courtesy, and empathy in handling patients, image processing and archiving, and the use of radiographic equipment.

RAD 111, Fundamentals of Radiography (2 credits - 15 lecture, 30 lab, 45 total contact hours) Prerequisites: Academic Reading & Writing Levels of 6; Admission to the Radiography program; RAD 100 minimum grade "B-"
This course is designed to prepare students to operate radiographic equipment in the clinical setting. Students will acquire the knowledge and skills needed to operate basic fixed and mobile x-ray equipment and accessory devices that are used to produce quality diagnostic radiographic images. This course will include laboratory sessions, which will integrate the theories of image production with the practical application of equipment operation.

RAD 112, Radiographic Positioning I (2 credits - 15 lectures, 45 lab; 60 total contact hours) Prerequisites: Academic Reading & Writing Levels of 6; RAD 101 & RAD 110, min. grade "C-"

This course presents the theories and practices that are utilized in the clinical setting to produce diagnostic radiographs of the chest, abdomen, and upper extremities. Radiographic terminology, patient preparation, patient positioning, proper manipulation of radiographic equipment, radiation safety practices, image evaluation, professional standards, and medical ethics will be discussed and practiced in the laboratory setting.

RAD 120, Clinical Education (2 credits - 240 total contact hours)
Prerequisites: Academic Reading and Writing Levels of 6; RAD 110 minimum grade "C-"
This course provides structured clinical experience in the application of knowledge and skill in positioning the spinal column, lower extremities, and related anatomy. This course continues the discussion of professional ethics, courtesy, and empathy in handling patients, radiation safety, film processing/imaging plate (IP) handling, and image archiving and radiographic equipment.

RAD 123, Radiographic Positioning II (2 credits - 15 lectures, 45; 60 total contact hours) Prerequisites: Academic Reading & Writing Levels of 6; RAD 112 and RAD 120, min. grade "C-" This course presents the theories and practices that are utilized in the clinical setting to produce diagnostic radiographs of the lower extremity, vertebral column, and bony thorax. Radiograph terminology, patient preparation, patient positioning, proper manipulation of radiographic equipment, radiation safety practices, image evaluation, professional standards, and medical ethics will be discussed and practiced in the laboratory setting.

RAD 124, Principles of Radiographic Exposure (2 credits - 30 lectures, 15 labs, 45 total contact hours) Prerequisites: Academic Reading and Writing Levels of 6; RAD 101 minimum grade "C-"
This course is a continuation of the material presented in RAD 111. The content of this course includes a comprehensive study of atomic theory, radiographic exposure technique, image production using analog and digital mediums, and the appropriate use of radiographic accessory devices. Students will learn theoretical principles for achieving optimal image quality and techniques for reducing patient radiation exposure. Laboratory sessions are included to provide a means of integrating theory with practical applications for use in the clinical setting. This course contains material previously taught in RAD 127.

RAD 125, Radiographic Procedures & Related Anatomy (3 credits - 45 lectures, 45 total contact hrs) Prerequisites: Academic Reading and Writing Levels of 6; RAD 110 minimum grade "C-"
This course is designed to teach the student how to obtain quality images of the gastrointestinal system, accessory organs, urinary system, and other special procedures associated with radiography. Students will also learn practical applications of contrast media and the appropriate use of fluoroscopic equipment and imaging accessories.

RAD 150, Clinical Education (3 credits - 384 clinical; 384 total contact hours) Prerequisites: Academic Reading and Writing Levels of 6; RAD 120 minimum grade "C-"
This course provides structured clinical experience in the application of knowledge and skill in positioning the chest and thorax, abdomen, spinal column, upper and lower extremities, and

related anatomy while working in general, portable, and fluoroscopic radiography. The course also provides students with an opportunity to learn and demonstrate professional ethics, courtesy, and empathy in handling patients, radiation safety, film processing/imaging plate (IP) handling, and image archiving and radiographic equipment manipulation.

RAD 190, Physical Foundations of Radiography (3 credits - 45 lectures, 45 total contact hours)
Prerequisites: Academic Reading and Writing Levels of 6; RAD 110 minimum grade "C-"
This course covers the theoretical and practical application of radiation physics with an emphasis on electromagnetic radiation, electricity, magnetism, x-ray circuitry, radiation production, and radiation's interaction with matter. This course was previously RAD 200.

RAD 215, Radiography of the Skull (2 credits – 15 lectures, 30 labs, 45 total contact hours)
Prerequisites: Academic Reading and Writing Levels of 6; RAD 110 and RAD 120, min. grade "C-"
In this course, students learn how to obtain quality radiographic images of the skull. Students will also be able to critically analyze the radiographic images of the skull and identify the pertinent anatomy. Laboratory sessions are included to provide the student with experience in skull positioning.

RAD 217, Clinical Education (3 credits - 336 clinical, 336 total contact hours) Prerequisites: Academic Reading and Writing Levels of 6; RAD 150 minimum grade "C-"
This course provides structured clinical experience in the application of knowledge and skill in positioning the skull and related anatomy. This course continues the discussion of professional ethics, courtesy, and empathy in handling patients, radiation safety, film processing/imaging plate (IP) handling, and image archiving and radiographic equipment.

RAD 218, Radiation Biology and Protection (3 credits - 45 lectures, 45 total contact hours)
Prerequisites: Academic Reading and Writing Levels of 6; RAD 120 minimum grade "C-"
This course will present the principles of radiobiology and radiation protection. Students will analyze the basic theories of the biological, genetic, and somatic effects of radiation on human cells and tissue and learn the current radiation protection standards and practices used in the healthcare setting to protect themselves, patients, and others from radiation exposure.

RAD 222, Pharmacology in Diagnostic Imaging (2 credits - 30 lectures, 30 total contact hours)
Prerequisites: Academic Reading and Writing Levels of 6; RAD 150 minimum grade "C-"
In this course, students are provided with an introduction to pharmacology and contrast media administration as it relates to the medical imaging profession. Students gain an understanding of diagnostic contrast media and the effects of these agents on the human body. Students also receive instruction in basic techniques of venipuncture, appropriate patient care practices during drug administration, and management of medical emergencies in the diagnostic imaging department.

RAD 223, Sectional Anatomy (2 credits - 30 lectures, 30 total contact hours) Prerequisites: Academic Reading and Writing Levels of 6; RAD 217 minimum grade "C-"
This course will present an introduction to sectional anatomy. Students will learn the basic

protocols for obtaining and analyzing sectional images. The sectional anatomy of the head, neck, chest, abdomen, pelvis, spine, and joints will be studied.

RAD 225, Clinical Education (3 credits - 336 clinical, 336 total contact hours) Prerequisites: Academic Reading and Writing Levels of 6; RAD 217 minimum grade "C"
This course provides continued structured clinical experience in the application of knowledge and skills for positioning the upper and lower extremities, chest, abdomen, spinal column, and skull during contrast studies, surgical procedures, and portable radiography. Students will demonstrate their mastery of the design and operational characteristics of equipment and accessories in diagnostic radiography.

RAD 232, Digital Imaging in Radiography (2 credits - 15 lectures, 30 labs, 45 total contact hours) Prerequisites: Academic Reading and Writing Levels of 6; RAD 190 minimum grade "C-"
In this course, students are introduced to the physical principles of digital radiography imaging systems. Topics include digital image acquisition processing, the effective use of exposure factors for digital image receptors (computed radiography and flat-panel digital radiography), imaging physics of digital fluoroscopy and mammography, and quality control for digital radiographic equipment. The principles of image display, archiving, and retrieval commonly used for Picture Archiving Communication Systems (PACS) will also be presented.

RAD 235, Pathology for Radiographers (3 credits - 45 lecture, 45 total contact hours) Prerequisites: Academic Reading and Writing Levels of 6; RAD 150 minimum grade "C-"
This course presents a study of pathological imaging to include respiratory, gastrointestinal, and accessory organs, genitourinary, skeletal, cardiovascular, and nervous systems. This course will investigate the etiology, signs, symptoms, and primary methods of diagnosis. An emphasis is placed on radiologic visualization of pathological conditions.

RAD 240, Clinical Education (2 credits - 224 total contact hours)
Prerequisites: Academic Reading and Writing Levels of 6; RAD 225 minimum grade "C-"
This course provides structured clinical experience in the application of knowledge and skill in positioning the chest and thorax, abdomen, spinal column, skull, upper and lower extremities, and related anatomy while working in general, portable, and fluoroscopic radiography. The course also provides students with an opportunity to learn and demonstrate professional ethics, courtesy, and empathy in handling patients, radiation safety, imaging receptor (IR) handling, and image archiving and radiographic equipment manipulation.

Clinical Education
Program Policies and Procedures
Students are advised that violations of any policy or procedure can result in disciplinary action and may lead to grade reduction, course failure, temporary discontinuation of training, or dismissal from the program.

Attendance Policy
Attendance Policies for Clinical Education Courses

Attendance at all scheduled radiography courses (e.g., lectures, labs, and clinical) is required. When a student misses class, it is the student's responsibility to notify the instructor and provide an explanation. Specific attendance policies are listed in each radiography course syllabus.

Excused Clinical Absences

Excused absences are defined as absences resulting from incapacitating illness, unforeseen accidents and emergencies, jury duty, academic leave, and bereavement leave. As medical professionals in training, student radiographers must learn and be efficient in performing many different skills. To achieve competency in the clinical setting the student must understand the importance of observing, assisting, and soloing radiographic procedures. From these observations, the student will acquire the skills and confidence needed to perform certain tasks associated with the profession. In addition, because success in clinical skills is so closely related to knowledge gained in academic courses, attendance in academic courses is tied to clinical performance. To ensure that this learning process occurs, (1) students are required to possess the maximum clinical hours to complete the radiography program and (2) students must be at their clinical site during the academic semester. This will require students to make up any time missed during their clinical training and not take vacations except during scheduled college breaks.

Incapacitating Illness, Accidents, or Unforeseen Emergencies

In certain instances, such as incapacitating illness, accidents, or unforeseen emergencies, an allotted amount of time is given per semester for missing clinical (see the grid below) before a student is placed on clinical probation; however, all hours missed during the semester must be made up to receive full credit for the term. For an absence to be considered excused, a student must provide a written explanation and/or official documentation (i.e. doctor's excuse) for the time missed. If it is deemed by clinical faculty that the explanation is not valid, appropriate disciplinary action will be taken based on Group II standards.

Course	Clinical Hours	Excused Clinical Absences Limit
RAD 110		3 Days
RAD 120		3 Days
RAD 150		4 Days
RAD 217		3 Days
RAD 225		3 Days
RAD 240		2 Days
Total Clinical Hours	1736 hours	

Procedure for Notifying the Clinical Site of an Absence

If a student is going to be absent for any reason he/she/they must use the following procedure when notifying their clinical site that they will be absent:

1. The student must personally notify their site's Clinical Preceptor and the program, Clinical Coordinator, on the day of the absence. Failure to do so is a no-call, no-show for the semester.
2. Students should call their clinical site no later than an hour after the shift has begun.
3. If there is a problem with calling the clinical site or speaking directly to the Clinical Preceptor, the student should either contact the departmental supervisor or continue their efforts in notifying the Clinical Preceptor. No other methods will be acceptable. A voicemail message must be left for the Clinical Coordinator or an email must be sent.
4. Students who do not notify clinical faculty personally will receive the appropriate disciplinary action determined by the clinical coordinator.
**Banking time for future appointments is not an option unless approved by the appropriate clinical faculty.

Clinical Hour Make-up Policy

Students must make up all clinical time missed except for academic or bereavement leave to receive full credit before the end of the current semester. Makeup time is to be scheduled with the Clinical Preceptor and no one else! It is the responsibility of the student to arrange for this make-up time with the Clinical Preceptor, and once arranged the student shall not change it. The student must also confirm this make-up time with the program's Clinical Coordinator. Students have until the last day of the semester to make up clinical time unless other arrangements have been made with the Clinical Preceptor and clinical coordinator. Missing academic classes or labs to make up clinical time is not acceptable. Students found to be doing so will have this make-up time taken away from their clinical hours and will receive a zero (0) for that lab assignment. If a student misses a scheduled makeup day, this will count as a Group II violation and will be dealt with according to disciplinary policies. If a student is unable to make up missed hours during the current semester, the semester will receive an Incomplete (I) for the course until all hours are made up. Students are required to make up all missed hours before continuing their clinical training. If this does not occur before the beginning of the next semester, the student will receive a failing grade (F) for the corresponding semester.

Unexcused Clinical Absences

Any other time missed not for incapacitating illness, unforeseen accidents and emergencies, jury duty, academic leave, and bereavement leave is considered unexcused unless deemed excused by the appropriate clinical faculty. An unexcused absence is a group II violation and will be dealt with according to clinical faculty.

Disciplinary Procedure for Unexcused Clinical Absences

The following disciplinary grading procedure will be used for unexcused absences per semester: Three (3) unexcused absences in a semester are considered excessive and a Group *II* offense and the student will be put on clinical probation. Five (5) unexcused absences will result in a one-letter grade reduction for the clinical course. Six (6) unexcused absences in a semester will fail of the clinical course. There are no "warnings" or "steps" to this policy.

Punctuality/Tardiness

The Radiography Program requires all students to be on time and be in their assigned area at the beginning of their designated shift. Students not in their area will be considered tardy. If being late is unavoidable, the student will call the Clinical Preceptor to let him/her know the time of arrival. A tardy is defined as clocking in on Trajecsys in the assigned area less than one minute before the designated start time of the assigned clinical shift, clocking out before the designated end time for the clinical shift, failing to clock in for a shift, or failing to clock out for a shift. Punctuality is an important part of a student's clinical evaluation and grade; therefore, students should make every effort to consistently be in their assigned area at the correct time.

Disciplinary Procedure for Tardiness

Three (3) tardies in a semester will be considered excessive and a Group *II* offense and the student will be put on clinical probation. Five (5) tardies will result in a one-letter grade reduction for the clinical course. Six (6) tardies in a semester will result in failure of the clinical course. As with unexcused absences, there are no "warnings" or "steps" to this policy.

Vacation Time

The students are allotted personal vacation time following the Washtenaw Community College academic calendar as it relates to holidays and breaks between or during semesters. Students are not permitted to take vacation time during the scheduled classes/labs and clinical assignments. Students who are found to be missing clinical time for a vacation will have their clinical course grade reduced by one letter grade for every eight hours missed and will be subject to other Group II violations.

Meals

Each student is expected to adhere to the policies of the affiliate for breaks and meals. Students who take prolonged breaks or lunch periods without the permission of their Clinical Preceptor and/or supervising radiographer will violate program policy. A Group II violation will be noted and the appropriate disciplinary action will be taken.

Notification of College Closing

Bad weather, utility outages, or other circumstances may cause WCC to cancel classes or delay the start of classes. WCC has implemented an emergency notification service that sends messages to your phone, PDA, email account, or TTY/TDD device for the hearing impaired. To sign up for the WCC Alert Service log in to MyWCC and choose "WCC Alert – Emergency Notification Service."

You also can learn if WCC is closed by calling WCC's School Closing Information Line at 734.677.5288 or checking the WCC homepage at wccnet.edu. Local radio and television stations will also provide information.

Canceling Clinical Days

If the college cancels classes due to inclement weather, students should not report to their clinical sites.

If the college closes after the clinical day has begun, the WCC Clinical Coordinator will notify off-site Clinical Preceptors to confirm the closure, and students will be dismissed from clinical. Any clinical hours missed due to an official college closure due to inclement weather do not need to be made up.

If the college operates on a delayed start schedule, students must report to their clinical sites at the adjusted opening time.

If the college remains open but hazardous driving conditions prevent a student from attending clinical, the missed hours must be made up. However, these absences will not be considered unexcused. Students should use their best judgment when deciding whether it is safe to travel to their clinical site in inclement weather.

If the college campus closes due to operational issues (such as a water main break, power outage, or gas leak) on a scheduled clinical day, students are expected to report to or remain at their clinical site.

Grading Policy

Grading Scale

The following grading scale will be used to determine all final radiography course grades:

00-97	2-80	2-70
6-92	9-76	9-67
1-89	5-73	6-64
8-86		3 and Below
5-83		

A breakdown of how the final course grade will be calculated (e.g., the weighting of grades, curves, and extra-credit options) will be included in each radiography course syllabus.

A grade of C- or higher must be achieved in all radiography courses to remain in the program. Students who receive a grade of C- in a radiography course will be placed on probation (see Academic and Clinical Probation). A grade below C- in a radiography course will result in dismissal from the program.

Examinations

Students are expected to take all examinations during assigned times, as listed on the course syllabus. Many exams given online will be proctored using a live service and a web-cam is required. If a student misses an examination without a valid reason, as determined by the course instructor, a grade of zero (0) will be posted in the electronic grade book for that

examination.

Remediation

Program Progression

To progress to the next semester, students must pass all radiography courses, didactic and clinical. Students who fail any radiography course at the end of a semester will be dismissed from the program.

Incomplete (I) Grades

If the instructor determines that the student has nearly completed the requirements of a course but is missing a small but essential part of the course due to unforeseen or extenuating circumstances, the instructor may issue an 'I' grade. The 'I' grade will remain on the student's transcript until the requirements of the course are met and a letter grade is given or an instructor-determined deadline has passed with a maximum of one year. After the deadline, the grade that has been preset by the instructor will be posted on the transcript if the work is not completed.

Withdrawal (W) Grades

A 'W' grade is posted to the student's permanent academic record for any course the student withdraws from after the 100% refund deadline. Students must notify the faculty of their decision to withdraw and formally withdraw from the program. Dosimeters and badges must be returned. If a student fails to return his/her dosimeters and ID badges a hold will be placed on the student's account preventing him/her/them from registering for any future courses.

Students who withdraw from the Radiography program are responsible for withdrawing from their radiography courses. The College's official course withdrawal policy is located at http://www.wccnet.edu/studentconnection/registration/drop/. The program faculty reserves the right to require the withdrawal of any student from the program based on the student's academic, clinical, or professional performance.

Grade Report

Each instructor will post the final course grade in the radiography Blackboard course. Students may also display and print a grade report through MyWCC.

Academic Failure

Students who fail or withdraw due to poor academic performance from a lecture or laboratory course will be dismissed from clinical training and the program for one year from the beginning of the failed semester. Students planning to reenter the program the following year must submit a reentry request to the Radiography Program Director before registering for the appropriate semester. Reentry into the radiography program will be based on space availability in the classroom, clinical site, and past student performance. Once space has been approved, the student will register for RAD 189--Clinical Education Reintegration and sign a contract that will stipulate the academic performance required to re-enter the program. All courses are subject to change.

Leave of Absence- Medical/Title IX

Academic Leave

Radiography students at WCC are encouraged to become involved in extracurricular educational events that augment their didactic and clinical experience (i.e. Tech Bowl Practice, professional conference, etc.). Students who participate in these extracurricular functions will be excused from didactic courses and clinical training and will receive attendance credit. Absence from classes while participating in an extracurricular activity does not relieve students from responsibility for any part of the course missed during the period of absence.

Medical Leave

A student who experiences medical conditions or psychological conditions that significantly impair his or her ability to function successfully or safely as a student may request a leave of absence from the program. To return to the program, the student must provide documentation from a physician or appropriate healthcare provider that the condition that precipitated the leave of absence has been sufficiently addressed to the point where it will no longer adversely affect the student's safety and functioning. If the appropriate document is not provided, the student will be denied readmission to the program.

Physical/Medical Restrictions

If during a student's training, the student becomes incapable of maintaining the program's technical and physical standards due to injury or limitations/restrictions placed on the student by a qualified medical professional, the student will be excused from their clinical site training for no more than one-quarter of the total clinical hours for that semester. All clinical time missed must be made up by the end of the semester unless other arrangements are made with the program's clinical coordinator. Students on medical restrictions will be allowed to re-enter their clinical training only with proper documentation from their health-care provider. Students who miss more than one-quarter of their clinical site training due to injury or medically imposed restrictions will receive an Incomplete (I) for the clinical course and will be allowed to re-enter clinical training the following year if space at a clinical site is available.

Pregnancy Leave

A pregnant student enrolled in the radiography program has certain rights under Title IX which are outlined on the WCC website under Pregnant Student Rights. In addition, the radiography program must adhere to the stated policy as provided by each clinical affiliate and the Michigan Department of Public Health, Division of Radiological Health. Female radiography students will make their own choice of whether or not to declare pregnancy. A declared pregnant woman is "a woman who has voluntarily informed, in writing, the college's radiation safety officer of her pregnancy and the estimated date of conception." See the Radiation Safety section regarding pregnant students.

The declared pregnant student may elect to take an excused pregnancy leave from the program for one year and be readmitted the following year. The student will be given credit for all college work completed but must register for a RAD 189 course the semester before

reentering the program to evaluate her clinical competency level. If a declared pregnant student does not return to the program after one year, she must reapply to the program and the need to repeat previously completed coursework will be reviewed on a case-by-case basis.

Military Leave
A military leave of absence is granted to students whose military reserve obligations may necessitate a period of absence from the program when they are called to extended active duty. Students returning to the program from active duty will be eligible for readmission once they have notified the program director and have supplied any pertinent military papers requested by the program director.

Personal Leave
A personal leave of absence may be granted for reasons that include but are not limited to, financial status; child care; illness, bereavement, or other critical matters in one's family.

Bereavement Leave
Students will be granted an excused leave from didactic courses and clinical training in the event of an immediate family member's death. This will include the father, mother, spouse, significant other, father-in-law, mother-in-law, brother, sister, grandparent, or relative living in the immediate household. These days may be taken without penalty at the discretion of the program faculty.

Prohibition of Sexual Misconduct (Title IX)
Any form of sexual misconduct jeopardizes the welfare of our students, employees, and the safety of the College community. Sexual misconduct includes acts of sexual assault, dating/domestic violence, sexual harassment, stalking, and more. Sexual misconduct diminishes students' dignity and may cause lasting physical and psychological harm. Sexual misconduct violates our institutional and community values. Sexual misconduct will not be tolerated at Washtenaw Community College and is expressly prohibited.

Academic Failure
Students who fail or withdraw due to poor academic performance from a lecture or laboratory course will be dismissed from clinical training and the program for one year from the beginning of the failed semester. Students planning to reenter the program the following year must submit a reentry request to the Radiography Program Director before registering for the appropriate semester. Reentry into the radiography program will be based on space availability in the classroom, clinical site, and past student performance. Once space has been approved, the student will register for RAD 189--Clinical Education Reintegration and sign a contract that will stipulate the academic performance required to re-enter the program.

Clinical Failure
Students who fail or withdraw from a clinical course due to failing grades, poor clinical performance, unfulfilled Clinical Probation Contracts, or Group II violations will be dismissed from clinical training and the program. If the student is allowed to reenter the program and

plans to reenter the program the following year, he/she must submit a reentry request to the Radiography Program Director before registering for the appropriate semester. If a clinical space is approved, the student will register for RAD 189--Clinical Education Reintegration—which will allow the student time to acclimate themselves to clinical training. Students should also be aware that reentry to the program after failure due to Group II violations or performance or behavioral issues will require a student to sign and fulfill a contract with the Department Chair, Program Director, and Clinical Coordinator that addresses the correction of those improper behaviors or performance issues. See the sections of the handbook concerning Group II violations and Criteria for Clinical Performance Evaluations.

Clinical failure due to Group I Violations will result in the student being dismissed from the program. The student should be aware that dismissal from clinical training and the program for all Group I violations is permanent and students will not be allowed to reapply to the radiography program. Be advised that dismissal from a program may cause you to be ineligible to take the ARRT registry exam at any time in the future! If you choose to try to re-enter training in another program, it is your responsibility and not the WCC Radiography Program to contact the ARRT for an Ethics Pre-Application Review of your status to be allowed to take your registry exam.

Important: Contracts signed by students to re-enter training in the Radiography Program after either academic or clinical failure are binding and long-term, and students who do not fulfill the terms of these contracts will be dismissed from the Radiography Program with no option for re-admittance. In other words, you will be given only one chance to re-enter training in the Radiography Program.

Disclaimer: Also, be aware that semester grading requirements and evaluation procedures for all courses are subject to change.

Readmission

The Radiography program allows the readmission of a student previously enrolled if the student is left in good standing. Students who did not leave in good standing (were suspended) and who have been out of registration for more than one year also must reapply for the program.

A student may be readmitted one time only. Readmission will be granted on a space availability basis only. Students must meet all current program eligibility criteria for admission to the Radiography Program. The program faculty reserves the right to refuse readmission to the program based on the student's academic, clinical, or professional performance.

Grievance Procedure

If a student wishes to contest an evaluation, grade, or sanction that they receive during a clinical or didactic course or if the student has a concern with an instructor, the following steps should be followed:

1. Students who have concerns/problems of an instructional nature (evaluations, clinical assignments, etc.) or a grievance shall first confer with the instructor involved to

resolve the issue informally. The student should take up these issues with the concerned parties within one week of their occurrence and expect to have the issue addressed/resolved within one week.

2. Issues that are unresolved at the informal stage or are more serious shall be referred by the student in writing to the program Clinical Coordinator or the didactic course instructor and the Radiography Program Director. This document must contain a description of the problem or issue, the names of those involved, and the dates on which any incident/problem took
place. The student should take up these issues with the Clinical Coordinator or the didactic course instructor within two weeks of their occurrence and expect to have the issue addressed/resolved within one week. If the issue concerns a final course grade, the student must submit a grievance within 5 months of the final grade posting.

3. Issues that are unresolved by the Clinical Coordinator or the didactic course instructor and the Radiography Program Director shall be referred by the student in writing to the Allied Health Department Chair using the above-mentioned format. The student should take up these issues with the Allied Health Department Chair within three weeks of their occurrence and expect to have the issue addressed/resolved within one week. If the issue concerns a final course grade, the student must submit a grievance within five months of the final grade posting.

4. Issues that are unresolved by the Allied Health Department Chair will be referred to the Divisional Dean of Health using the above-mentioned format. The student should take up these issues with the Divisional Dean within four weeks of their occurrence and expect to have a response within one week. If the issue concerns a final course grade, the student must submit a grievance within five months of the final grade posting.

5. A final appeal may be made in writing to the Vice-President for Instruction. The Vice President for Instruction shall make a final determination and shall inform the student in writing of his/her decision.

The Radiography Program's student grievance process conforms to that of Washtenaw Community College and students with questions are encouraged to read the College's WCC Complaint Procedure for clarification. All documentation of student grievances will be kept on file for two years and will include information on how the grievance was resolved. All grievances lodged against the Radiography Program are reviewed on an annual basis by the radiography faculty to look for trends that might negatively affect the quality of the educational program.

Academic Integrity

It is expected that a student will complete all assignments, quizzes, written exams, and practical exams independently unless otherwise indicated, in writing, by the instructor. Students are not to discuss any quiz, written exam, or practical with other students until all students have been tested. Students are expected to report violations of academic integrity.

Academic dishonesty consists of any deliberate attempt to falsify, fabricate or otherwise tamper with data, information, records, or any other material that is relevant to the student's participation in any course, laboratory, or other academic exercise or function. Any instances of academic dishonesty in this course will be pursued under Article 4095 of the WCC Board of Trustees' Policy Manual.

1. Plagiarism
    a. The act of stealing someone else's work and attempting to "pass it off" as your own.
    b. Plagiarism includes but is not limited to:
        i. Offering the work of another as one's own.
        ii. Offering the work of another without proper acknowledgment.
        iii. Failing to give credit for quotations or essentially identical expressions of material taken from books, encyclopedias, magazines, other reference works, term papers, reports, or other writing of another individual.
2. Cheating
    a. Obtaining or attempting to obtain, or aiding another to obtain credit for work, or any improvement in evaluation of performance, by any dishonesty or deceptive means.
    b. Cheating includes but is not limited to:
        i. Copying from another's test or examination
        ii. Receiving or providing unauthorized assistance on exams, quizzes, and other assignments.
        iii. Using unauthorized materials during an exam or quiz.
        iv. Alteration of grades on an examination, an assignment, or records of an instructor.
        v. Unapproved discussion at any time of answers or questions on an examination or test
        vi. Taking or receiving copies of an exam without the permission of the instructor.
3. Other academic misconduct
    a. Academic misconduct is broadly defined as any prohibited and dishonest means to receive course credit, a higher grade, or a lower grade.
        i. Example: Using false excuses to obtain extensions of time or to skip a course session.

Academic dishonesty will result in one or more of the following actions:

1. Receiving a grade of F for the course.
2. Dismissal from the program.

(Note: Everyone involved in the academic dishonesty incident will be subject to disciplinary action.)

Patient Confidentiality

Students are to maintain patient confidentiality as outlined by the Health Insurance Portability and Accountability Act (HIPAA). Breach of confidentiality may violate federal and or state

statutes and regulations and may be subject to prosecution under the law.

Policy on Disciplinary Action

Disciplinary Action

There is an expected level of interpersonal relations and professional conduct that is required when working and training in a medical setting. All students in the Radiography Program at Washtenaw Community College should make an effort to display professionalism and establish goals to obtain efficiency in this area. Students would be advised to review The Radiologic Technologists Professional Code of Ethics and The Principles of Professional Conduct for Radiologic Technologists **(Appendix N)** While training in the clinical setting students will be required to adhere to the policies and procedures of the Radiography Program and sponsoring clinical education site. Failure to do so will result in disciplinary action and possible dismissal from the program. The act of violating a policy or procedure set by the program or sponsoring a clinical education site will result in Group I or II disciplinary action.

The student will be notified of unacceptable behavior(s), infractions of this handbook, or violations of the WCC Student Rights, Responsibilities, and Conduct Code (SRRCC) by either the program faculty or appointed College staff (depending on the nature and severity of the situation). The student will have the opportunity to respond to any allegations. The SRRCC is found at 4095 - Student Rights, Responsibilities, and Conduct Code Policy.

Group I Violation

Students who violate policies or display behaviors found in the Group I category will receive a failing grade for a clinical education course, be expelled from clinical education, and be expelled from the radiography program. Dismissal for these offenses is permanent. Be advised that dismissal from a program may cause you to be ineligible to take the ARRT registry exam at any time in the future! It is the student's responsibility, not the WCC Radiography Program, to contact the ARRT for an Ethics Pre-Application Review of the student's status to be allowed to take the registry exam.

The following are ***Group I offenses***:

1. Obtaining, possessing, or using controlled substances or alcohol on hospital premises. Reporting to the clinical station under the influence of any of these substances.
2. Theft, abuse, misuse, or destruction of the property or equipment of any patient, visitor, student, hospital personnel, or the hospital.
3. Disclosing confidential information about any patient, student, hospital personnel, or clinical site without proper authorization, or any violation of HIPAA.
4. Immoral, indecent, illegal, or unethical conduct on hospital premises.
5. Possession of a weapon on hospital premises.
6. Intimidation/threat (physical or verbal) or assault of any patient, visitor, student, instructor, or hospital personnel.
7. Disruption, destruction, or removal of patient, student, or official hospital records without authorization.

8. Falsifying any student or official hospital records.
9. Failure of a student to contact the Clinical Preceptor before the first clinical day or failure to complete all onboarding requirements of the CEC.
10. Unexcused absence of three consecutive clinical days or three no-call, no-shows in a semester.
11. Request for removal by the clinical site for continued failure to perform at the expected competency level, willful incompetence, serious infractions of site-specific rules, insubordinate behavior, or determination by the site's Clinical Preceptor(s) or administration that continued training of the student would constitute a safety risk to patients or a disruption to normal department operations.
12. The unsafe practice of the profession.
13. Violation of the Radiography program's Safety Guidelines.
14. Violation of the principles stated in the ARRT Standards of Ethics **(Appendix N)**

Note: Documentation of these incidents must be on file and signed by the Clinical Coordinator and student. **(Appendix K & L)**

Group II Violation

Violation of policies or display of behaviors found in the Group II category will result in one of the following disciplinary actions:

1. A written or oral warning is given documenting the offense and counseling of the student.
2. Suspension - Dismissal from the clinical site for a specific number of days. This will be determined by the Clinical Coordinator and/or Clinical Preceptor or Department Chair
3. A written reprimand and one letter grade reduction.
4. Failing grade for the course.

Depending on the severity of the offense, any or all of the disciplinary actions listed above could be taken against the student. The Clinical Preceptor, Clinical Coordinator, Program Director, and Department Chair will determine disciplinary actions to be taken. All students who incur a Group II violation will be placed on Clinical Probation for the remainder of the semester.

The following are ***Group II offenses***:

1. Excessive tardiness.
2. Excessive absence.
3. Leaving the assigned area without permission.
4. Soliciting, vending, or distribution of literature, written or printed matter without proper authorization.
5. Using abusive, obscene, or inappropriate language around any patient, visitor, student, or hospital employee.
6. Inappropriate dress or appearance based upon WCC policy.
7. Leaving hospital premises during assigned clinical hours without proper authorization.
8. Improper use of attendance or clinical hour make-up system according to the

clinical affiliate or program.

9. Violation of the policies or procedures of the student's assigned clinical site.
10. Exceeding the Radiography Program Radiation Dose Limits at the Action Level 2 dose.

Right to Due Process

In administering the policies of the Radiography Program, the Radiography Program and Washtenaw Community College guarantee each student accused of violating a published Radiography Program or College policy those principles of due process and fundamental fairness established by the Constitution of the United States. Due process at Washtenaw Community College means that a student is assured that his/her rights as a student will be protected. Specifically, a student has the right to be given written notice of all charges brought against him/her, the right to an opportunity to refute any charges either in writing or during a hearing made up of program officials and college officials outside of the program, the right to written notice of all decisions made after a hearing, and the right to appeal a decision. Students with questions are encouraged to read the WCC Board of Trustees Policy Administrative Procedures for Board of Trustee Policy 4095.

Student Professional Behaviors

Social Media

Students enrolled in The WCC Radiography Program who choose to utilize social media must be aware that the program reserves the right to take appropriate actions against dialogue by students who fail to observe our guidelines respecting the proper use of social media sites as outlined below:

1. Students in the WCC Radiography Program accept responsibility for the content they post on social media sites and will not impersonate, mislead, or purposely obscure the College, the Radiography Program, or give their Practicum/Extern education site's identity when using social media. Social media is about enhancing these entities' credibility and reputation. The Radiography Program also expects participants in dialogue on social media sites to refrain from impersonating, misleading, or purposely obscuring their identities.

2. The WCC Radiography Program protects its intellectual property and respects the intellectual property of others. Therefore, students will not intentionally use copyrighted material without permission or use others' company or business names, logos, or other trademark-protected materials in a manner that may mislead or confuse others concerning the College or Practicum/Extern education site's brand or business affiliation. The WCC Radiography Program will respond to clear and complete notices of alleged copyright or trademark infringement.

3. The WCC Radiography Program recognizes the importance of maintaining the confidentiality of an individual's personal and medical data. Therefore, the program expects that students will not include, reference, or reveal such personal data in dialogue in their social media postings.

4. The WCC Radiography Program accepts that there are differences and differing opinions about healthcare issues affecting the field of healthcare and therefore strives to maintain a courteous, polite, and professional dialogue about these issues even when we might disagree with opinions expressed by others. The program expects that students in dialogue on social media sites also will accept differences and differing opinions by responding respectfully when they disagree or have a difference of opinion.

5. Students in the WCC Radiography Program will not use social media to bully, intimidate, or threaten harm or violence to anyone, including threats directed to the program faculty or Practicum/Extern education site staff.

6. Students in the WCC Radiography Program will not use social media to defame the reputation of others, whether they be individuals, groups of individuals, organizations, or business entities.

7. Students in the WCC Radiography Program will not publish or post profanity or obscene or pornographic communication on social media, whether in a user profile or background or in a response, comment, or message posting or response.

8. Students in the WCC Radiography Program will properly use the technology/capabilities as an effective communications tool and will not engage in spam or other misuse of communications technologies/capabilities.

The WCC Radiography Program does not tolerate social media dialogue that does not conform to reasonable standards of civility outlined above and will therefore take appropriate steps to ensure that students' social media posts conform to such behavioral standards. Such steps may include Practicum/Extern probation, grade reduction, or dismissal from the program.

Electronics and Telephone Use Policy

1. Cell phones and electronic devices are expected to be turned off or in silent mode.

2. An instructor reserves the right to take a student's cell phone away from them for the duration of the class.

3. During an exam, cell phones are to be turned off completely, and removed from the desktop.

4. Electronic device applications are not permitted for use during class or an exam unless permission is given by the instructor.

5. In case of an emergency, the students may use departmental lab phones or may ask the department secretary for assistance.

6. Students must obtain permission from each instructor for each class before recording any lecture or lab. Audio or video recordings may not be posted or shared in any format without

the written consent of the instructor, guest lecturer, or any student who is represented in the recording (see audiovisual consent form).

7. Cell phone use by students in clinical areas at the student's Practicum/Extern site is prohibited. Students may use their phones to log in and out of Trajecsys at the start and end of each day. Using a cell phone in an exam room or work area may be considered a HIPAA violation by your Practicum/Extern site. The Radiography Program also views it as a distraction from your primary responsibilities, demonstrating poor professional judgment and unsafe professional practice. Both are classified as Group I violations and may result in dismissal.

8. Clinical site phones may not be used for personal calls except for emergencies and only with prior approval from the clinical site supervisor.

9. Cell phones must be silenced and placed in a secure place and used only during breaks or lunch. Exceptions to this policy include potential emergencies, such as a family illness. Cell phone and electronic device use are prohibited during all testing and assessment activities.

10. The use of cell phone cameras is prohibited during class lectures, labs, and clinical sites.

Internet Use Policy

Electronics devices are permitted in the class for note-taking and working on projects as appropriate. Personal e-mail and the internet are not to be accessed during lectures and labs unless approved by the instructor and are prohibited at a clinical site.

Access to classroom computers in the classroom is limited to instructional use only. All users of the computers in the radiography lab (OE 121) must comply with all federal, state, and other applicable laws; all applicable WCC policies and procedures; and all applicable contracts and licenses. Students who violate this policy may be subject to suspension and/or dismissal from the Radiography program and may be subject to criminal prosecution.

Lab Utilization/Open Lab

Periodically faculty may provide opportunities for students to practice positioning skills and equipment manipulation in the radiography lab located in OE 121. No actual radiographs may be taken during this time. Use of the lab without supervision or taking radiographs during open lab are considered *Group I* violations and are grounds for dismissal from the program.

Guests

Guests are not allowed in the classroom or lab areas.

Policy Prohibiting Recording

No student may record any classroom activity without express written consent from your instructor. If you have (or think you may have) a disability such that you need to record classroom activities, you should contact Learning Support Services (LSS) to request an appropriate accommodation. Until I have been provided a copy of the approved

accommodation by LSS or yourself, recording is not permitted. Violation of this policy is considered a Group II violation and will result in disciplinary action as outlined in the WCC Radiography Program Handbook.

Dress Code- Clinical

Radiography students at Washtenaw Community College represent both the College and Program standards through their appearance and demeanor, reflecting their professionalism and pride in the field. The uniform dress code is established in agreement with the Clinical Education Centers and must be strictly followed.

Students are required to wear a properly fitting royal blue scrub top, pants, and athletic shoes. The scrub top must have the WCC patch sewn on the shoulder, and students may choose to have "WCC Radiography Student" embroidered on the front. Surgery uniforms are to be worn only during surgical procedures or when deemed necessary by clinical education staff.

Uniforms must be clean, wrinkle-free, and free of any odors, including perfumes. Students must maintain a neat and professional appearance, arriving at their clinical site well-groomed and free of body odor, tobacco smells, or strong fragrances. Facial hair must be neatly trimmed, and hair longer than upper back length must be tied back to prevent injury.

Jewelry should be kept to a minimum, and expensive items should not be worn in patient care areas. Cosmetic nails should be minimal to reduce infection risks and ensure safe equipment operation. Additionally, students must adhere to any additional personal appearance and hygiene policies set by their clinical site.

The following attire is not permitted in the clinical setting:

- T-shirts (unless worn under the scrub top)
- Jeans, shorts, sweatshirts, or athletic wear
- Open-toe shoes, Crocs, or similar footwear
- Any clothing deemed unprofessional by the clinical affiliate

Students who arrive in unacceptable clinical attire or with improper hygiene will be sent home. The missed hours will be recorded as unexcused, and the student will receive a Group II Violation.

Dress Code- Lecture & Lab

Students may wear street clothes during lecture courses and lab activities. However, they must adhere to the following guidelines:

- Tops must not be revealing or excessively low-cut.
- Midriff-baring tops are not allowed.
- Low-rise pants that expose undergarments are not permitted.
- Clothing and shoes must be clean and well-maintained.

Identification (ID) Badges

Each student will be issued a personal WCC radiography student photo identification badge

(ID) at no cost. If lost, a fee will be assessed for a replacement ID badge. Students must wear a WCC radiography student photo identification badge on their uniform. In addition to these badges, clinical affiliates may require students to wear an identification badge issued by hospital security. The badge is the property of the clinical education site and must be returned when the students complete their clinical education assignment.

Exposure to Hazardous Materials and Universal Precautions

Since transmission of several human diseases capable of causing significant illness and death may occur from direct contact with "blood, saliva, or other body fluids" their droplets, aerosols, and possibly contaminated laboratory wastes via broken skin, sharps, and needle sticks, it is essential that standards of practice which will protect health students, their families, and clients/patients be put in place and enforced. This simplified approach prevents the potential transmission of infectious diseases which may include, but are not limited to, seasonal influenza, Tuberculosis (TB) hepatitis B, hepatitis C, methicillin-resistant Staphylococcus aureus (MRSA), Clostridium difficile (C-Dif), and COVID-19, This approach also establishes a standard that would prevent questions and concerns of classmates\laboratory partners and assist in preserving confidentiality for all patients and students.

Students are made aware and educated on the inherent risks associated with careers and training for careers in allied health, particularly in radiography. All students sign and submit the Clinical Infection Compliance Control Statement **(Appendix G)**

<u>The Standard for such protection shall include:</u>

A. A basic premise is that all patients should be considered potential carriers of contagious diseases.

B. The strong recommendation is that all students obtain immunization, if available, against known diseases transmitted or direct contact with blood, saliva, or other body fluids to help prevent disease transmission.

C. The reduction of cross-contamination between treatment areas and non-treatment areas such as home and school. Examples include, but are not limited to wearing uniforms from a clinical area to a public place, such as the grocery store or movies.

D. The use of universal precautions at all times when working with any real or simulated client. The following are illustrations of universal precautions:

1. Wash hands before and immediately after every patient contact.
2. Gloves are recommended for every patient interaction.
3. Gloves must be worn when in contact with blood, body fluids, and mucous membranes for handling items or surfaces soiled with blood or body fluids, or for performing venipuncture and other vascular access procedures.
4. Change gloves after caring for each client, as glove integrity cannot be assured with washing and repeated use.
5. Masks and protective eyewear or face shields should be worn during procedures that are likely to generate airborne droplets, blood, or other body fluids to protect the exposure of mucous membranes of the mouth, nose, and eyes or as dictated by the site/college policy.
6. Wear N-95 masks as prescribed by hospital protocol.

Communicable Disease Policy - Recommendations for Clinical Experience Restrictions

If/when students are diagnosed with any communicable disease the student should consult a physician and the student must provide the Clinical Coordinator with a return to work letter stating the date the student is permitted to return to work/school/clinical. Students will be responsible for making up any time missed due to illness.

Concerning exposure to COVID-19, students will be required to follow protocols specific to their clinical sites regarding testing and quarantine.

Immunization Requirements

All health occupation students, including radiography students, enrolled in clinical courses are required to provide proof of their CPR certification, background check, medical history, present physical condition, and health insurance. Students in the Radiography Program will purchase a background check through Viewpoint Screening https://www.viewpointscreening.com. Before students attend the mandatory program orientation session in late March of the year they are admitted, they must have completed their ViewPoint Screening background check and submit the following documents to Viewpoint Screening:

- Medical History form (completed and signed by the student and their healthcare professional)
- Evidence of immunity for Measles, Mumps, and Rubella (MMR), Varicella (Chicken Pox), and Hepatitis B
- Current vaccine record
- Tdap vaccine or Td booster if Tdap greater than 10 years
- Before August 1st of the year, they are admitted, students must submit the following to Health Portal / Viewpoint Screening:
- CPR/BLS Certification from American Heart Association (equivalent to healthcare provider/professional)
- Evidence of Health Insurance
- Evidence of TB test results within the last 6 months using a two-step process

Students must also provide proof of receiving the influenza vaccine each flu season. The vaccine must be given between September 1 and October 15 and it is the student's responsibility to upload those documents into ViewPoint Screening as well as provide any necessary documentation to their CEC regarding the flu vaccine. Non-compliance in this area will prevent a student from entering the CEC and will count as an unexcused absence until resolved.

Students must provide proof of receiving the COVID-19 vaccine (1 or 2 doses as indicated by the manufacturer) as required by the clinical sites.

Students who do not submit the required documentation by the specified dates will forfeit their clinical placement unless other arrangements have been made with the program's clinical coordinator. Other important documents listed below will be filed and signed digitally through

Trajecsys. Additional items may be added as needed.

- Program Handbook Agreement **(Appendix F)**
- Clinical Supervision Program Policies **(Appendix D)**
- Magnetic Resonance Imaging (MRI) Screening Form **(Appendix E)**
- Radiation Safety Agreement **(Appendix C)**
- Clinical Infection Control Compliance Statement **(Appendix G)**
- ASRT student membership is verified in the second year and a digital record is kept on file by the Clinical Coordinator.

Students will be given instructions and guidance for signing up for a background check in Viewpoint Screening before the orientation date.

All students will be required to undergo another two-step TB test providing 2 negative TB skin tests or comparable blood testing and a CPR recertification and submit these to ViewPoint Screening if these expire at any time during the semester. In addition, the sponsoring CEC may require other information such as the student's immunization records and TB and/or CPR certification status. It is the student's responsibility to provide their CEC with these documents.

IMPORTANT--Your clinical sites and the college will only accept certifications and renewals from the American Heart Association. Many online CPR renewal sites seem cheap and convenient, but don't be fooled! Hospitals and our program will not accept them because they do not include hands-on evaluation with a manikin. DON'T WASTE YOUR MONEY and choose an approved course.

Note: Students currently in the program with incomplete files due to the expiration of documents (e.g., CPR, TB) or failure to secure ASRT membership before the beginning of their second year will be ineligible for clinical and will not be allowed to participate in the hospital setting. The days that are missed will be considered unexcused absences (refer to attendance policy) and will result in a substantial grade reduction or failure of the clinical course. It is the student's responsibility to notify the clinical coordinator or Clinical Preceptor of changes that need to be noted in his/her file.

Clinical Instruction

Success in Clinical Education

To be successful in anything we feel is worth accomplishing requires complete dedication, discipline, and the ability to develop practical and suitable goals. Developing goals for the tasks ahead provides a course that depending on our efforts and commitment can yield a variety of results. By enrolling in the Radiography Program, you have put into place the conditions for goals to be developed. Whether these goals are realized and achieved is solely up to the individual. Only the individual can develop his/her personal goals. Students entering this program have two choices when assessing what they want to achieve during their training. They can either put forth maximum effort and complete the program with competent training and marketable skills or slide through with minimal exertion and develop sub-par abilities and a poor professional attitude. One of the main goals radiography students must

establish to be successful in their training is to strive for excellence in the clinical setting.

Clinical education is an essential ingredient in the development of practical skills for radiography students. Clinical education tests the student's ability to integrate what has been taught in the classroom and performed in the lab and apply this knowledge in executing specific competencies associated with the profession. Initially, students begin their clinical training in a passive mode by observing and assisting the radiographer in the examination room. As the student progresses a more active role is established by attempting basic competencies under the direct supervision of a qualified radiographer. As the student gains experience and confidence in performing a variety of radiographic procedures and is successfully evaluated and proven competent in these tasks, a gradual move into a more independent clinical performance stage evolves. This progression will continue until all required competencies are successfully completed.

The degree of commitment you put into achieving academic excellence in clinical education (and in the classroom) will determine the extent of professional satisfaction you will encounter upon completing this program. If a student is satisfied with a mediocre performance in the clinical setting and has that "just let me pass" attitude during class, he/she is assured limited professional growth IF he/she is ever able to find employment. On the other hand, if a student strives for excellence and has set practical goals for academic development, that individual will have a better opportunity for securing a position, advancement, and professional satisfaction.

As an allied health professional in training, the radiography student must learn the skills of his/her profession and the importance of working as a team. Being competent in performing the technical aspects of one's occupation is expected, but if patient care is compromised by the lack of teamwork among departments or miscommunication with patients, the quality of patient care, as well as the overall patient experience, will suffer. While in the clinical setting, students must learn the importance of developing patient care skills and professionalism. These behaviors are expected and should be one of the goals students establish at the beginning of the program--remember that the most important person in the hospital or clinic is the client, the patient we serve.

The Main Goal: Strive for Excellence and Professionalism

Clinical Requirements

Students must meet the minimum requirements listed in the Technical Standards **(Appendix M).** In addition, students must submit all required documentation in Viewpoint Screening by the prescribed deadline and other documents as needed in Trajecsys. Failure to comply will result in the student forfeiting his/her/their clinical seat.

Clinical Education Centers (CEC)

There are many factors involved in providing quality clinical education for a radiography program to be successful. One of these factors is the effectiveness of the clinical education center (CEC). These institutions offer the facilities and staff to accomplish course objectives

set by the program and provide supervised competency-based radiography training. Hospitals, imaging centers, and health care clinics all contribute to the professional development of the radiography student.

The Washtenaw Community College Radiography Program is affiliated with numerous clinical education centers. By allowing the student to train in a variety of healthcare facilities, we hope to enhance the learning experience by exposing the student to a variety of medical modalities, radiographic procedures, and the expertise of the departmental staff. Students must bear in mind that they are guests (not employees) of the CECs and have no protection under that center's human resources policies, yet they will be held to the same standards of conduct as employees. Students can be removed or asked to leave their clinical placement for any infraction of that facility's rules or for any behavior deemed inappropriate by the facility. If a student is employed in some capacity by the CEC they are assigned to, the student cannot count work hours as clinical hours, and nothing they do during their work hours (competencies, simulations, etc.) can be counted toward their clinical education.

The following is a list of clinical affiliates:

1. Ascension Providence Hospital- 47601 Grand River Ave, Novi
2. Ascension Medical Center – Howell 1225 S. Latson Rd, Howell
3. Corewell Health Dearborn, 18101 Oakwood Blvd, Dearborn
4. Corewell Health Taylor, 10000 Telegraph Rd, Taylor
5. Corewell Health- Trenton 5450 Fort St, Trenton
6. Corewell Health Wayne, 33155 Annapolis, Wayne
7. DMC Children's Hospital of Michigan, 3901 Beaubien St, Detroit
8. Henry Ford Hospital-West Bloomfield, 6777W. Maple Rd, West Bloomfield
9. Henry Ford Medical Center -Bloomfield Township, 1961cS. Telegraph Rd, Bloomfield Hills
10. Henry Ford Medical Center Royal Oak, 110 E 2nd Street, Royal Oak
11. Henry Ford Medical Center -Plymouth, 40777 Ann Arbor Rd, Plymouth
12. Henry Ford Hospital-Wyandotte, 2333 Biddle, Wyandotte
13. John D. Dingell VA Medical Center 4646 John R St, Detroit
14. Michigan Medicine University of Michigan Hospital, 1500 E Medical Center Dr, Ann Arbor
15. Michigan Medicine Mott Children's Hospital, 1540 E Hospital Dr. Ann Arbor
16. Michigan Medicine Brighton Center for Specialty Care, 7500 Challis Rd Brighton
17. Michigan Medicine East Ann Arbor Health Center, 4262 Plymouth Rd Ann Arbor
18. Michigan Medicine Canton Health Center, 1051 N. Canton Center Rd Canton
19. Michigan Medicine Domino's Farms 24 Frank Lloyd Wright Dr, Ann Arbor
20. Michigan Medicine Livonia Center for Specialty Care, 19000 Haggerty Rd Ste 101, Livonia
21. Michigan Medicine Northville Health Center, 39901 Traditions Dr. Northville
22. Michigan Medicine West Ann Arbor, 380 Parkland Plaza Ann Arbor
23. Michigan Medicine Briarwood, 1901 Briarwood Circle Bldg 9 Ann Arbor
24. Michigan Medicine South Main, 2098 S. Main St. Ann Arbor
25. ProMedica Regional Medical Center, Monroe, 740 N. Macomb, Monroe
26. Trinity Health- Chelsea Hospital 775 S. Main St, Chelsea
27. Trinity Health St. Joseph Mercy Hospital Ann Arbor, 5301 McAuley Dr., Ypsilanti

28. Trinity Health St. Joseph Mercy Hospital Brighton, 7575 Grand River Road, Brighton
29. Trinity Health St. Joseph Mercy Hospital Canton, 1600 S. Canton Center Road, Canton
30. Trinity Health St. Joseph Mercy Hospital Livingston, 620 Byron, Howell
31. Trinity Health St. Mary Mercy Hospital, 36475 West Five Mile Rd., Livonia
32. Trinity Health Livonia Medical Center 19000 St. Joe's Pkwy, Livonia
33. Veterans Administration Hospital, 2215 Fuller Rd., Ann Arbor

Clinical Education Center Orientation

Each student is required to attend a CEC orientation specific to that student's clinical education site. Although the radiography program will supply students with basic guidelines concerning Universal or Standard Precautions (see Communicable Disease Prevention: Universal Precautions) and HIPPA (see Appendix A), the student's CEC will provide more specific and detailed instructions concerning that institution's response to hazards, emergency preparedness, and medical emergencies, and the institution's specific policies addressing HIPAA and Standard Precautions. Clinical education sites treat students as employees in this regard to be in regulatory compliance; therefore, attendance at clinical site orientations is mandatory.

Clinical Education Placement Policy

Students enrolled in clinical courses will be assigned to a variety of clinical education centers affiliated with the radiography program, throughout the two-year program. After the clinical coordinator has received all required medical documentation, verified health insurance, and background check information, students will be assigned to a CEC before the fall semester.

Clinical placement of students is the responsibility of the Clinical Coordinator, and every effort is made to make the clinical site assignment fair and equitable among all students. We have clinical sites across southeastern Michigan spanning 5 counties. The goal is to provide each student with a well-rounded clinical education throughout the two years. Every effort is made to consider location and make the associated transportation issues to and from clinical sites as fair and equitable as possible; however, the clinical education experience is the priority and the logistics are secondary. Students should expect to travel up to 60 miles one way from the college campus to their clinical sites.

Clinical Education Schedule

The number of clinical days per week will depend on the semester and will be stated for each semester on the clinical course's syllabus. Except for off-shift rotations, a student's clinical experience will take place during the day shift and will be for an entire eight-hour day. The contact hours (clinical and didactic) must not exceed 40 hours per week). Students may not attend clinical for more than **ten hours** in any one clinical day, and may only do so to make up clinical time already missed and with the permission of and prior scheduling with their Clinical Preceptor.

Clinical Interdepartmental Scheduling

While in the CEC, students will be assigned to a variety of general diagnostic areas within the radiology department. The interdepartmental clinical schedule is under the direct supervision

of the Clinical Preceptor. The CEC will develop a rotation schedule, which will allow the student the appropriate time to fulfill course objectives for the semester and encourage participation in general diagnostic areas to complement professional development and clinical competency. Rotations typically last one to two weeks and students will rotate more than once through an area in any given semester.

Off-Shift Rotations

Radiographers work a variety of shifts in 24 hours, every day of the week. Each shift can require different responsibilities and skills to be efficient in one's position. As a student radiographer, it is to your advantage to experience these variations and gain the skills needed to function in these shifts. To broaden the educational experience in the clinical setting, students will be required to receive a minimum of 80 hours on an off-shift rotation. These shifts will include afternoons, mid-shift, and weekends; however, an off-shift rotation can begin as early as noon if a clinical site deems it necessary. First-year students may begin to fulfill this requirement in their third semester of clinical training (RAD 150). Due to the orientation period needed at a new facility, second-year students may begin this rotation in their sixth semester of clinical training (RAD 225). All 80 hours do not have to come from one particular shift or in one semester - a combination of shifts and semesters is permitted. It is important to note these off-shift rotations are not performed in addition to the normal day shift; the off-shift replaces the regularly scheduled day shift.

Performance Objectives

Specific objectives have been developed regarding the student's performance during their off-shift experience. Students will be evaluated according to these objectives and expected to perform proficiently based on requirements established by their Clinical Preceptor. During their off-shift rotation, students will be required to achieve four (4) competencies within the 80 hours required. The main focus of these competencies should be pediatrics, trauma, portables, and surgery.

The Clinical Preceptor will manage off-shift rotation schedules. Before beginning an off-shift rotation, the student must display a competency level approved by the clinical supervisor. Student radiographers will report to their shifts according to the department's schedule. No variations will be allowed unless approved by the Clinical Preceptor and clinical coordinator. Students will be supervised by the appropriate coordinator and/or assigned technologist. Students must also inform the Clinical Coordinator of the planned off-shift hours in advance.

Diagnostic Radiology vs. Specialty Imaging

The purpose of clinical education is to allow the student vocational (hands-on) experience needed to succeed in his/her chosen profession. The field of radiology is an aggregate of imaging modalities that provides diagnostic imaging for medical diagnosis and treatment. It is the responsibility of the program and medical faculty to offer the relevant clinical experience to produce professionally qualified and skilled radiographers. It is also the responsibility of the student radiographer to complete course objectives for each clinical semester and to gain competency and skill by repeated execution of radiographic procedures. For this to occur,

students will be assigned to areas that accommodate training in diagnostic radiography for the majority of their clinical experience. Except for off-shift rotations, students' clinical experience will take place during the day shift of their CEC and will be for an entire eight-hour day. Students may not attend clinical for more than ten hours in any one clinical day, and may only do so to make up clinical time already missed and with the permission of and prior scheduling with their Clinical Preceptor.

Specialty rotations will be allowed in the final semester of clinical training (RAD 240). For a student to be placed in this rotation, he/she must display the entry-level abilities of a fully trained radiologic technologist and cannot be on clinical or academic probation. The following are considered specialty rotations: Angiography, Computed Tomography, Nuclear Medicine, Cardiac Catheterization, Magnetic Resonance Imaging, Ultrasound, Mammography, Mobile Radiography, and Radiation Therapy. Concerning mammography, the radiography program will make every effort to place a male student in a mammography clinical rotation if requested. However, male students are advised that placement in a mammography rotation is not guaranteed and in fact, is very unlikely to happen because the radiography program cannot override clinical site policies that restrict mammography rotations to female students due to liability concerns and patient interests.

Clinical Preceptor

While at the clinical site, the student will be under the supervision and guidance of the Clinical Preceptor(s). As an on-site representative of the radiography program, the Clinical Preceptor establishes the means for students to accomplish course objectives in the radiology department and enforces regulations according to program policy.

Responsibilities of the Clinical Preceptor to the Student:

1. Provide opportunities for radiography students to observe and participate in clinical education.
2. Interpret the policies and regulations of the affiliate institutions for the radiography student.
3. Plan learning activities for the radiography student, which draw upon and enrich the college course curriculum.
4. Assign student radiographers to the appropriate radiographic areas. These assignments should be based on the student's abilities and the time he/she has been in the program.
5. Confer regularly with departmental staff on the student's clinical performance.
6. Provide feedback to program faculty regarding the student's clinical performance and evaluation.
7. Counsel students when necessary regarding clinical performance and completing course objectives.
8. Coordinate the evaluation of the student's clinical performance by way of performance evaluations.
9. Maintain confidential folders on students with attendance information and clinical performance evaluation forms.

Responsibilities of the Student to the Clinical Preceptor:

1. Do what's asked of you by your Clinical Preceptor to the best of your ability without grumbling—give an honest effort.
2. Respect your Clinical Preceptor's authority and the time they take to work with you—don't be insubordinate and do use criticism constructively. Insubordinate behavior toward your Clinical Preceptor is grounds for failure of your clinical course and permanent suspension from the radiography program.
3. Communicate openly—ask about things before they become a problem and use proper lines of communication.
4. Own up to your mistakes/errors and learn from them—that's how you learn! Dishonesty leads to huge negative consequences, most of them for you!

Clinical Supervision

Students in the WCC Radiography Program will be supervised while taking images at their clinical site to ensure that you are not putting yourself and your patients in harm's way. Students agree to abide by these supervision policies and sign an agreement stating such in Trajecsys.

Direct Supervision

While in the radiology department of your clinical site, a student taking medical images will be supervised at all times. According to the regulations of the Joint Review Committee on Education of Radiologic Technologists (JRCERT), no more than one student shall be assigned to a qualified radiographer (ARRT). Direct supervision is defined as the radiographer being in the presence of and watching the student during all parts of the procedure that the student is performing. All medical imaging procedures will be performed under the direct supervision of a qualified radiographer until the student achieves competency. To ensure proper supervision, students will be assigned to a qualified radiographer in the appropriate scheduled area.

Indirect Supervision

After a student has successfully demonstrated competency in a specific medical imaging procedure, the radiography student can receive indirect supervision from a qualified radiographer. Indirect supervision is defined as supervision provided by a qualified radiographer immediately available to assist a student regardless of competency level. The radiographer should be adjacent to the room or location where a radiographic procedure is being performed. Immediately available does not mean by phone from another floor of the hospital.

Repeated Radiography Examinations

If it is necessary for a student to repeat ANY unsatisfactory radiographs, the student will perform ALL repeated radiographers under the direct supervision of a qualified staff radiographer.

Because supervision is an issue of concern for the safety of our patients and the safe practice of our profession, violating it constitutes a Group I infraction and suspension from the Radiography Program. Therefore, advocate for yourself and make sure that you are being

properly supervised. If you are not, please go to your Clinical Preceptor.

Evaluation of Clinical Performance

Evaluation of student performance at the clinical site is as important as didactic assessment within the classroom. The evaluation process in the clinical setting provides the student with the appropriate feedback to interpret his/her level of professional development. Students receive this data in the form of written evaluation (Radiographic Procedure Evaluation and Clinical Performance Evaluation) and daily interactions with staff radiographers and Clinical Preceptor(s). All clinical evaluation forms must be officially signed by the student, evaluator, and Clinical Preceptor to be valid. Students will be evaluated on his/her ability to demonstrate professional development in three areas:

1. Cognitive Knowledge - Acquired knowledge and a conceptual understanding.
2. Psychomotor Skills - The ability to perform specific competencies.
3. Affective Behavior - Judgment, values, and work ethic while at the clinical site.

These three components provide the appropriate feedback so students have the opportunity to advance based on their abilities, knowledge, and motivation. From this data, clinical staff and program faculty can evaluate the student's performance based on the completion of procedure evaluations and course objectives. Once the level of clinical competency has been determined, the student is counseled on his/her performance in the clinical setting and graded accordingly.

Trajecsys

All Radiographic Procedure Evaluation (Competencies) and Clinical Performance Evaluations will be administered through the Trajecsys tracking system. Therefore, all Radiography students must purchase access to the online clinical documentation system Trajecsys. After purchase, the student must register @ www.trajecsys.com and will be activated at that time. This system is a requirement for your Clinical Education documentation. Students have access to this system for the duration of the program.

The policies governing the use of the Trajecsys online clinical documentation system are:

1. Students should use their smartphone to access www.trajecsys.com to log time in and out.
2. Some clinical affiliates may allow students to access www.trajecsys.com to enter the times that they enter and exit the clinical site (time card).
3. Students are only allowed to enter www.trajecsys.com at these sites. They are NOT allowed to use the Internet for any other purpose.
4. The Clinical Preceptor at each site will be approving the students' time cards online weekly.
5. Students who do not enter their clinical time daily will be counted as tardy or absent and subject to a reduced clinical grade if the clock in and out process is not consistently used properly.
6. Disciplinary actions may be applied if a student does not abide by this policy.

Students will be evaluated in five areas:

1. Self-Study Assignments/Research
2. Radiographic Procedure Evaluation (Competencies)
3. Clinical Performance Evaluation
4. Radiographic Positioning Simulation Exercise
5. Radiographic Maintenance Record (Exam Logs)

Self-Study Assignments/Research

While enrolled in the radiography program, students will be required to write a series of research papers and/or related assignments on subject material associated with the field of radiography and to become medical professionals. These assignments will allow the student to gain a better understanding of the chosen topic and review didactic material relevant to their learning experience. In addition, because clear, written communication is such an essential part of medical professions, these assignments will allow students to practice and improve their writing skills.

Since the research papers will be based on a scientific theme, the appropriate style and citation format must be present to receive full credit. Students unfamiliar with this writing style can review websites and publications dedicated to this subject easily accessed on the Internet, Campus Library or the writing center on campus, or online writingcenter@wccnet.edu. Requirements will be given before each assignment.

Written and research self-study assignments will determine 10-20% of the final evaluation and those submitted after the due date will receive a zero (0) grade. All self-study assignments must be submitted or the student will receive an incomplete (I) grade for the clinical course until the assignment is submitted. If the assignment is not submitted by the end of the following semester, then the incomplete grade from the prior clinical course will be changed to a failing grade (F).

Radiographic Procedure Evaluation (Competencies)

Radiographic Procedure Evaluations (competencies) are an important instrument used to assess the student's level of professional development. This evaluation process demonstrates the student's knowledge, skill, and competency level for a particular radiographic procedure. Students are required to prove their level of competency by performing a variety of radiographic examinations professionally. Successful completion of clinical training will be dependent on the student's performance in this area.

Student radiographers will be required to complete fifty-two (52) competency evaluations within the two years of a clinical study. The number and type of procedure per semester will be stated in the course objectives for that particular term. The actual number of competencies for each clinical course is listed below.

Radiography Course	Required Number of Competencies
RAD 110	3

RAD 120	7
RAD 150	At least 12 but no more than 15
RAD 217	At least 10 but no more than 12
RAD 225	At least 10 but no more than 12
RAD 240	10 or fewer

**Exceptions can be made on a case-by-case basis by the Clinical Coordinator

Requirements for Competency Evaluation
The following must be satisfied before a competency evaluation is performed:

1. Upon satisfactory completion of didactic coursework, laboratory practice, and/or clinical practice, the student will be eligible to perform a competency evaluation. Students must receive didactic and clinical instruction on how to perform a procedure before competency in that procedure can be earned.

2. Before the student can be evaluated for competency, he/she must solo the procedure a minimum of five times (review the definition of solo in the glossary) under the direct supervision of a qualified radiographer. The exception to this requirement is surgical procedures or examinations that are not routinely performed in the department - this will be determined by the Clinical Preceptor and/or supervising radiographer. Any combination of five solos and assists may be used when mastering these procedures and solos of a procedure can be performed before the procedure is covered in didactic instruction.

Note: Your Clinical Preceptor and the radiographers you are working with will determine when you will be allowed to comp on a procedure, whether it is after 5 or 50 solos—they have the final say as to your readiness to attempt a competency. Do not question their judgment or authority concerning this.

Criteria for Competency Evaluation
Upon satisfactory completion of didactic coursework, laboratory practice, and clinical education, the student is eligible to perform a competency evaluation. The evaluator will utilize the following criteria to assess the student's competency.

GENERAL
Interpretation of
Requisition
The student
was able to:

1. Identify the procedure and clinical indications on the requisition.
2. Identify the patient's name, age, and

mode of travel. **Facilities Readiness**

1. Have a radiographic table and other equipment clean and ready.

2. Have the room properly stocked with all necessary accessories.
3. Have equipment turned on and IR

oriented properly **Equipment Use**

The student was able to:

1. Prepare and safely operate standard radiographic and fluoroscopic equipment.
2. Prepare and safely operate mobile x-ray equipment.
3. Prepare and safely operate tomographic equipment or any equipment necessary to perform the examination being evaluated.

Performance Evaluation Patient Care and Handling

The student was able to:

1. Identification of patient using 2 identifiers (in alignment with site protocol)
   a) Ask the patient his/her name.
   b) Check the name on the wristband.
2. Assist the patient, whatever his/her mode of travel, to and from the x-ray table.
3. Have the patient properly gowned and kept covered for modesty.
4. Explain the examination to the patient calmly and clearly so he/she understands.
5. Give proper moving and breathing instructions.
6. Follow correct procedures for the isolation of patients.

The student was able to:

1. Assist the patient on the table to the required positions.
2. Place the imaging media and the body part in the correct relationship.
3. Angulate and center the central ray.

Correct Accessory Selection and Use

The student was able to:

1. Select the proper imaging media (IR, bucky, grid, etc.)
2. Use immobilization devices as needed - sandbags, sponges, etc.
3. Fill syringes with correct contrast media or other solutions using an aseptic technique.
4. Prepare barium contrast medium according to departmental protocol.

Correct Technical Factor Selection

The student was able to:

1. Use the technique chart to select a technique or properly select AEC to acquire optimal radiographic quality.
2. Adjust exposure factors for body habitus, pathology, and motion.
3. Adapt exposure factors for changes in SID, grid ratio, collimation, and the clinical site's exposure indices for that exam.

General Radiation Protection

The student was able to:

1. Cone or collimate to the part.
2. Use gonadal shields where applicable.
3. Wear dosimeters.
4. Wear a lead apron and gloves as appropriate.
5. Keep the door to the radiographic room closed.
6. Request that any person in the vicinity of the patient move away before making an exposure.
7. Acquire information regarding the possibility of pregnancy following departmental policy.

IMAGE EVALUATION

Correct Centering and Alignment

The radiograph demonstrates:

1. Correct transverse and longitudinal centering of the CR to the part and the part to the imaging media.
2. Correct tube-part-image receptor alignment.
3. Correct SID and CR angulation.

Correct Density/Contrast or Window/Level, and

Definition The radiograph demonstrates:

1. Proper density/contrast or window/level.
2. Those factors were adjusted for pathology or motion.
3. Correct IR, grid, etc. were used.
4. No motion, grid lines, or artifacts.

Correct Position and

Rotation of Part The radiograph demonstrates:

1. The body part is in proper position and rotation.

Correct Patient Identification

and Markers The radiograph demonstrates:

1. Right and/or Left Student markers are properly placed.
2. Time and/or position markers correctly placed
3. Patient information, name, number, etc. clearly visible.

Evidence of Radiation Protection

The radiograph demonstrates:

1. Cone or collimation marks are visible.
2. Gonadal shield is visible (where applicable).
3. NO repeats at the supervisor's discretion.
4. Exposure indices are within the manufacturer’s range of exposure for that

exam or the kVp and mAs selected are within the department norms

Image Critique

The student was able to:

1. Recognize whether or not they have acquired a quality image.
2. Describe to the evaluator the difference between poor and good image quality for the exam.
3. Identify to the evaluator the pertinent anatomy shown.

Radiographic Procedure Evaluation Form (Appendix H)

Student competencies will be assessed by using the Radiographic Procedure Evaluation Form available on Trajecsys. When the student is allowed to perform a clinical competency, the student will notify the supervising radiographer before attempting the procedure. The radiographer will then monitor the procedure and evaluate the student according to competency evaluation criteria.

On the form, there are marks (*) next to specific tasks that must be performed to successfully complete the evaluation. If the student fails to execute one of these skills, the evaluation process is terminated and the student receives an unsatisfactory competency evaluation. Depending on the severity of the deleted task, the student may be allowed to finish the procedure. Once the procedure is complete, the student is advised and given remedial instruction before attempting future competencies. If a written form is used it should be signed by the student, technologist, and Clinical Preceptor before submitting it to Trajecsys. Those completed paper forms will be housed in the office of the Clinical Coordinator.

Review of Procedure Evaluation Form

Once the evaluation process has ended, the radiographer will review the student's proficiency in performing the examination. The minimum acceptance level of competence in performing a radiographic procedure evaluation is 100%. This is a pass/ fail approach. If the student has successfully completed the competency, the Clinical Preceptor at the site will verify the competency and enter it into Trajecsys. Trajecsys then makes the competency visible to the Clinical Coordinator who will then validate, sign-off, and record the competency in the student's record. Students are required to continue performing that procedure to attain additional experience and professional efficiency. Students who do not earn the competency at 100% will be required to repeat the competency evaluation following remedial instruction.

Note: All Procedure Evaluation Forms must be signed by the student, Clinical Preceptor, and Clinical Coordinator in Trajecsys. The Clinical Coordinator can sign in place of the Clinical Preceptor. Digital signatures in Trajecsys are acceptable. In addition, students must submit documentation (i.e., Exam Logs) that they have soloed an exam at least five times for the competency to be recorded by the Clinical Coordinator. Exceptions may be made at the discretion of the Clinical Coordinator. Until all requirements are satisfied, the student will receive an incomplete grade for the semester.

Late Procedure Evaluations (Competencies)

All Radiographic Procedure Evaluations (competencies) must be completed by the last reporting day of the clinical education course that the student is enrolled in. After that date, no procedure evaluations will be accepted and the student's grade will be based on competencies completed at that time. Only under extreme circumstances will a student be allowed to complete his/her competency requirements beyond the last reporting day of the term. This will be determined by the program's clinical coordinator and he/she will assign the appropriate percentage based on the student's situation.

Competency Maintenance

Although a student may have successfully completed a clinical competency evaluation early in the program, continued performance of that procedure is required for the student to develop into a skilled radiographer. Once competency is received, the student is obligated to perform that procedure on every possible occasion. Failure to do so is a violation of student responsibilities and contradicts the educational process. A continued display of this behavior will be noted as a clinical deficiency on the student's Performance Evaluation and if continued may result in remedial instruction and reevaluation of the procedure in question, resulting in the competency for the procedure in question to be withdrawn.

Students will only gain confidence and progress in their training by observing, assisting, and soloing as many procedures as possible.

Simulated Competency Evaluation

In the event a required procedure cannot be obtained during the semester because it is not commonly seen at the student's clinical site, the Clinical Preceptor and clinical coordinator may choose to grade the student by performing a simulated procedure. The simulation evaluation must be scheduled with the Clinical Preceptor. The grade obtained from the simulation will be applied toward the semester evaluation and will appear on the Student Clinical Internship Record in Trajecsys as a simulated exam. The actual performance of the procedure must be executed to receive competency status. Procedures should be performed on patients; however, up to eight mandatory procedures may be simulated if demonstration on patients is not feasible.

A simulation can only be scheduled after the student has performed the procedure five times (either through simulation or patient procedure) solo and all means of attaining an actual patient have been exhausted. Simulations will be done during the RAD 225 and RAD 240 semester only.

Radiographic Procedure Evaluations (competencies) will determine 50-60% of the final evaluation. Unless approved by the Clinical Coordinator, competencies submitted after the last reporting day of the semester will not be used to calculate this portion of the final evaluation, and the clinical course grade will be reduced accordingly. The student will receive an incomplete (I) grade for the semester until the required number of competencies for that semester are made up. All deficient competencies from the prior clinical course must be completed by the end of the following semester; if not, then the incomplete grade from the

prior clinical course will be changed to a failing grade (F).

Radiographic Procedure Categories & Requirements
Students are required to successfully complete 51 competency evaluations in their two years of clinical training. Before beginning an academic semester, students will be informed of specific radiographic procedures that will be required for that term. The requirements listed are the minimum core clinical competencies necessary to establish eligibility for participation in the ARRT Radiography Examination.

Students must demonstrate competency in all 36 mandatory Radiological Procedures. Students must demonstrate competency in 15 of the 34 elective Radiological Procedures. Electives should be demonstrated on patients whenever possible but may be simulated if the demonstration on a patient is not feasible. – Candidates must select either UGI or Contrast Enema plus one other elective procedure from this section. In addition, one exam must be chosen and completed from the skull section. In addition to the Radiological Procedure competencies, the ten General Patient Care competencies are Mandatory. These competencies may be simulated.

Imaging Procedure	Mandatory or Elective	Date Completed	Patient or Simulated	Competence Verified By
Chest and Thorax				
Chest Routine	M			
Chest AP (Wheelchair or Stretcher)	M			
Ribs	M			
Chest Lateral Decubitus	E			
Sternum	E			
Upper Airway (Soft-Tissue Neck)	E			
Sternoclavicular Joints	E			
Upper Extremity				

Thumb or Finger	M			
Hand	M			
Wrist	M			
Forearm	M			
Elbow	M			
Humerus	M			
Shoulder	M			
Trauma: Shoulder (Scapular Y, Transthoracic or Axillary)*	M			
Clavicle	M			
Scapula	E			
AC Joints	E			
Trauma: Upper Extremity (Nonshoulder)*	M			

***Trauma requires modifications in positioning due to injury with monitoring of the patient's condition

Imaging Procedure	Mandatory or Elective	Date Completed	Patient or Simulated	Competence Verified By
Lower Extremity				
Toes	E			

Foot	M			
Ankle	M			
Knee	M			
Tibia-Fibula	M			
Femur	M			
Trauma: Lower Extremity*	M			
Patella	E			
Calcaneus	E			
Head – Candidates must select at least one elective procedure from this section.				
Skull	E			
Paranasal Sinuses	E			
Facial Bones	E			
Orbits	E			
Nasal Bones	E			
Mandible	E			
Temporomandibular Joints	E			

Spine and Pelvis				
36. Cervical Spine	M			
37. Thoracic Spine	M			
38. Lumbar Spine	M			
39. Cross-Table Lateral Spine (ReRecumbent)	M			
40. Pelvis	M			
41. Hip	M			
42. Cross Table Lateral Hip	M			
43. Sacrum and/or Coccyx	E			
44. Scoliosis Series	E			
45. Sacroiliac Joints	E			
Abdomen				
46. Abdomen Supine	M			
47. Abdomen Upright	M			
48. Abdomen Decubitus	E			
49. Intravenous Urography	E			

***Trauma requires modifications in positioning due to injury with monitoring of the patient's condition

Imaging Procedure	Mandatory or Elective	Date Completed	Patient or Simulated	Competence Verified By
Fluoroscopy Studies – Candidates must select two procedures from this section and perform per site protocol.				
Upper GI Series (Single or Double Contrast)	E			
Contrast Enema (Single or Double Contrast)	E			
Small Bowel Series	E			
Esophagus	E			
Cystography/Cystourethrography	E			
ERCP	E			
Myelography	E			
Arthrography	E			
Hysterosalpingogram	E			
Surgical Studies				
C-Arm Procedure (Requiring manipulation to obtain multiple projections).	M			

Surgical C-Arm Procedure (Requiring manipulation around a sterile field).	M			
Mobile Studies				
Chest	M			
Abdomen	M			
Upper or Lower Extremity	M			
Pediatrics (age 6 or younger)				
Chest Routine	M			
Upper or Lower Extremity	E			
Abdomen	E			
Mobile Study	E			
Geriatric Patient (65 years or older and physically or cognitively impaired due to age).				
69. Chest Routine	M			
70. Upper or Lower Extremity	M			
71. Hip or Spine	E			

Clinical Performance Evaluation

Clinical performance evaluations are used to assess the competency level and professional development of the student radiographer. As the student progresses in their training, certain levels of proficiency will be expected by clinical staff and program faculty. By evaluating the student in these areas, we can ascertain specific competencies and behaviors that should be encouraged and those that are considered limiting to professional development. Students should use this feedback as a means to establish goals for achieving a higher level of clinical efficiency. At mid-semester and the end of the semester, students will be evaluated by their Clinical Preceptor based on their Clinical Preceptor's observations and the input of qualified radiographers that the student has been assigned to work with. At such time the Clinical Preceptor will evaluate the student based on the time spent in the area or department **(Appendix I).** These evaluations will be completed and shared with students via Trajecsys. The students will have an opportunity to view their evaluations and discuss them with their Clinical Preceptor and the Clinical Coordinator. Students must review and sign off on their evaluations within one week of submission; unless this requirement is satisfied, the student will receive an incomplete grade for the semester. Competence in clinical performance will determine 20% - 30% of the final evaluation. Students receiving a 2 "Needs Improvement" in any area of the Clinical Performance Evaluation will be placed on Clinical Probation and must submit an action plan to the program Clinical Coordinator and Program Director to correct the performance. Students who receive a grade of 80% or less on a final Clinical Performance Evaluation will be placed on Clinical Probation.

Criteria for Clinical Performance Evaluations

The following is a combination of Affective and Psychomotor Behaviors. The student must be evaluated according to the length of time in the program and their ability to display these behaviors in the clinical setting.

Psychomotor Behaviors

Patient Communication

1. Identification of patient using 2 identifiers.
2. Communicates professionally.
3. Explains the procedure to the patient in a language the patient can understand.
4. Gives clear instructions to achieve proper positioning.
5. Demonstrates cultural competency and sensitivity.
6. Follows department/organizational procedures regarding patient confidentiality.

Patient Safety and Welfare

1. Demonstrates an understanding of promoting patient care.
2. Demonstrates proper technique for transferring the patient to the exam table.
3. Aware of patient condition and limitations.
4. Acts in a manner that supports patient safety.

Technical Aptitude

1. Has a good understanding of the image acquisition process using various equipment with minimal assistance.
2. Demonstrates the proper manipulation of radiographic, fluoroscopic, and portable equipment including tube, SID, table movement, locks, and bucky alignment
3. Demonstrates the ability to set up a control panel for radiographic and fluoro exam
4. Uses equipment efficiently, effectively, and carefully.

Organization of Work

1. Room is properly prepared.
2. Evaluates the needs for the procedure.
3. Performs the procedure in orderly ways.

Quality of Work

1. Provides the patient with prompt and quality care.
2. Strives to consistently provide quality results.

Ability to Work

1. Uses good judgment.
2. Follows directions satisfactorily.
3. Completes directions satisfactorily.

Quality of Positioning

1. Strives for positioning excellence.
2. Uses technique charts correctly.
3. Ability to improvise to achieve quality results.

Quality of Technique

1. Strives for technical excellence.
2. Uses technique charts or automatic exposure controls correctly.
3. Considers the physical characteristics of the patient when applying exposure factors.

Affective Behaviors

Personal Appearance

1. Student comes dressed appropriately in uniform.
2. Neat and clean in appearance.
3. The student is well-groomed and maintains good personal hygiene.
4. Portrays a professional image in appearance and communication.
5. Follows all hospital policies regarding hair/nails/tattoos/ piercings.

Accountability

1. Student arrives on time consistently.
2. Student uses designated time in/time out system appropriately.
3. The student places a high priority on his/her clinical time and is not absent frequently.
4. Student shows initiative and is eager to learn new procedures and seeks continuous improvement.
5. Takes ownership of any mistakes made and acts proactively.
6. Student demonstrates the ability to think critically and solve problems or challenges as they arise.
7. The student uses professional judgment and demonstrates respect for organizational norms.

Interpersonal Relationships

1. Student communicates well with staff members, peers, and physicians to promote a respectful and productive work environment.
2. Student functions well as a team member.
3. Student follows directions well and asks appropriate questions when necessary

Self- Improvement

1. Student uses constructive criticism as a means to improve clinical performance
2. Student seeks out ways to improve whether by practice and repetition or advice/ education from a technologist or both.
3. The student respects the technologists and their knowledge and experience and defers to them.

Self-Evaluation

Periodically, students will be required to evaluate their performance in the clinical setting. These self-evaluations will allow the student to assess their achieved goals, professional development, and areas in which he/she requires additional instruction and/or repeated participation. Students should use these evaluations to establish future academic goals and the means to achieve them.

Self-evaluations are for the student's personal use and will not be part of the grading process.

Radiographic Positioning Simulation Exercise

As a practitioner in the field of radiography, radiologic technologists are expected to possess knowledge in, but not limited to radiographic positioning, patient care, and radiographic equipment and operation. These simulation exercises will provide the radiography student the opportunity to display his/her competencies in these areas.

In collaboration with radiographic positioning courses RAD 112, RAD 123, RAD 125, and RAD 215 students will attend scheduled positioning labs in their clinical setting or on campus. These labs will be structured to coincide with the material being taught in the appropriate positioning course. During the clinical lab session, the Clinical Preceptor or clinical coordinator

will demonstrate positioning for specific radiographic procedures outlined in the positioning lab schedule. Procedures demonstrated in these lab sessions will be based on the routines found in the procedure manual provided by the individual clinical site. Upon completion of the demonstration, each student will participate in positioning a fellow student or clinical staff member under the supervision of the instructor.

Simulation Positioning Post-Evaluations ("Simulation Exams")

Simulation exams will be administered periodically to assess the student's ability to perform radiographic procedures in the clinical setting. During the evaluation process, the student will position a classmate or clinical staff member in a designated radiography room. The student will be expected to perform the simulation as if he/she were involved in an actual radiographic procedure. No actual radiographs will be taken.

Students will be evaluated in the following areas: Patient Care and Communication

1. Properly prepare the exam room for the procedure.
2. Demonstrates the proper methods of identifying patients and exams to be performed
3. Inquires about pregnancy status
4. Provide the patient with a brief explanation of the procedure.
5. Maintains patient modesty throughout the procedure.
6. Demonstrates clear and professional communication including proper instructions throughout the procedure.
7. Provides maximum radiation protection for patient, self, and others when applicable.

Equipment Operations

1. Select the proper cassette size, IR, or field size.
2. Select the appropriate SID
3. Manipulate the tube correctly by utilizing the appropriate locks.
4. Set up a unit control panel with appropriate exposure factors and/or photo-time setting.
5. Utilize technique chart or automatic exposure control properly where applicable.
6. Proficiently uses the equipment.
7. Use appropriate accessories for the procedure (filters, sponges, lead blockers, etc.).

Quality of Positioning

1. Demonstrates knowledge of radiographic procedures.
2. Directs central ray to the appropriate centering point.
3. Uses the correct tube angulation when necessary.
4. Collimates to IR or field size or anatomical structure
5. Marks images appropriately with "R" or "L" markers.
6. Align anatomy to the center of the image receptor.
7. Directs central ray to the center of film/ bucky.

During the RAD 110 and RAD 120 clinical education courses, students must obtain a

competency score of 80% or above to pass the simulation test. Those who do not achieve this score will be allowed to retest on failed areas of the simulation at the clinical coordinator's discretion; however, students who perform poorly throughout a simulation will not be allowed to retest. The highest score that can be achieved on a repeated simulation test is 90%. During the RAD 150 clinical education course, simulation exercises are timed, and students will receive no points for those parts of the simulation not completed in the required time, and students must achieve a 90% or above competency rating in the designated time to pass the evaluation process. A student who does not demonstrate competency in the required areas of the simulation examination by scoring above the aforementioned percentages will receive a failing grade for the evaluation and will be placed on Clinical Probation. The instructor will determine the degree of competency using the appropriate evaluation forms. Student competency in this area will determine 20% - 30% of the final evaluation.

Radiographic Maintenance Record (Exam Logs)

Each student must maintain a record of the variety and quantity of radiographic procedures performed during all Clinical Education assignments. This will be done with the Student Daily Exam Log sheet made available to students via Trajecsys. Students will begin using this system on their first day of clinical education for the Fall semester of their first year and throughout the rest of their clinical training. When doing exams at their clinical sites, students will use this system to record the exams they do each day. The system will record the major study area, specific procedure, participation level, number of exams, repeats, date, and the name of the supervising technologist, and the supervising technologist's sign-off. The most important of all is the name of the supervising technologist who is assigned to/working with the student and their sign-off. The student is required to get the initials or signature of the technologist with whom they work daily. If the supervising technologist does not sign off on a student's exam log, it is essentially stating to the program faculty that the student has been working while not being supervised! Students must submit exam logs via Trajecsys weekly. Each of these will be worth 10 points of the student's self-study grade per week. If a student does not submit an Exam Log or submits it without a supervising technologist's sign-off, it will be treated by the program faculty as if that student has worked an entire week without being supervised. This is viewed as an "Unsafe practice of the profession" which would be a Group I violation of the Radiography Program rules and grounds for dismissal from the program.

At the end of the semester the Trajecsys system will tally up the number of exams performed, and the associated participation level; observed, assisted, or soloed and the student will be required to submit an answer to a series of reflection questions at the end of each semester. The questions are dependent upon the semester and the goals and objectives of the course.

Students will be using the log sheet in the Trajecsys system to verify that they have soloed an exam the minimum five times required to be granted a competency for that exam. They will also be keeping this record until the end of their training to prove that they are being properly supervised and have completed 100 non-duplicate exams by the end of the program. This is an ongoing process that the student must attend throughout each semester. By the end of the student's clinical training, each student must participate in at least 100 non-duplicate exams. If a student fails to reach the 100-non-duplicate exam threshold by the end of their

clinical training, they will receive an Incomplete (I) for RAD 240. This Incomplete grade will only be removed when the student has reached the 100- non-duplicate exam threshold.

Semester Exit Conferences

The Clinical Coordinator will determine the final grade for clinical education. This will be based on the completion of assignments, scores received during simulation exercises, and performance evaluations submitted by the Clinical Preceptor(s). During the final week of the term, students will meet with the Clinical Coordinator (on campus or via Zoom) for a semester exit conference. The purpose of this meeting is to ensure that all evaluation forms, papers, and records are complete and have been signed by the proper individuals. Students will receive their final grade and appropriate feedback for semester performance.

Enrichment Opportunities

Radiography students at WCC are encouraged to become involved in extracurricular educational events that augment their didactic and clinical experience (i.e. Tech Bowl Practice, professional conference, etc.). Students who participate in these extracurricular functions will be excused from didactic courses and clinical training and will receive attendance credit. Absence from classes while participating in an extracurricular activity does not relieve students from responsibility for any part of the course missed during the period of absence.

Clinical Probation

Students may be placed on probation for unsatisfactory progress in a course or unsafe or poor performance at a clinical site. The probationary status serves as a warning that poor academic and/or clinical performance may result in dismissal from the program. Students on probationary status are ineligible to participate in any extracurricular program-sanctioned activities (i.e., conferences, trips).

Academic Probation

Students who receive a final grade in the “C-” range (75% - 73%) for any lecture or laboratory radiography course will be placed on academic probation. The student must …

1. submit an Academic Probation Action Plan form to the program director, which outlines, in detail, what the student plans to do to improve in the next semester.
2. schedule a meeting with the program director to discuss specific areas that require improvement and identify resources to assist the student.
3. schedule a meeting with the program director to review the student’s midterm grades.

If the student receives any final grades in the C- range during the probationary period, he or she will remain on academic probationary status and must continue to meet with the program director.

Clinical Probation

Students who receive a final grade in the “B” to “C-“ range (88% - 73%) for any clinical course, receive an “Unsatisfactory” or “Needs Improvement” in any area of the final Clinical Performance Evaluation, receive an 80% or less on a final Clinical Performance Evaluation,

fail any simulation exercise, or who receive a Group II violation **(Appendix L)** will be placed on Clinical Probation. The student is responsible, under the guidance of the Program Director and the Clinical Coordinator for correcting the performance or behavioral issue. The students are only eligible to continue their clinical training under the following guidelines:

1. The student will submit an action plan to the program clinical coordinator which outlines, in detail, what the student plans to do to improve his/her/their clinical performance or behaviors.
2. Specific areas that require improvement (cognitive, psychomotor, and affective) will be outlined in a contract developed by the program faculty.
3. This contract will outline specific courses of action and/or levels of competency the student must achieve to continue in the program. The student must show the scores or competency detailed in the contract by the end of the contract period to be eligible for continuation in the program.
4. If it is determined that the student has achieved the scores, competencies, or behavioral changes under the guidelines specified in the contract, the incomplete grade will be changed to the appropriate grade at the end of the contract period and the student will be allowed to continue in the program.
5. If it is determined that the student has not achieved the scores, competencies, or behavioral changes under the guidelines specified in the contract, the student will receive a failing grade “F” at the end of the semester for the clinical course and will no longer be eligible to continue in the program.

Radiation Safety

The Washtenaw Community College Radiography Program strives to maintain a safe working and learning environment for faculty, staff, students, and the public. To promote the safe and effective use of ionizing radiation in diagnostic imaging the program has endorsed and adopted the principle of keeping exposures to ionizing radiation As Low As Reasonably Achievable (ALARA). ALARA means making every reasonable effort to maintain exposures to radiation as far below the dose limits set by federal and state regulations as practical, taking into consideration all economic and social considerations.

Dosimeters (Radiation Badges)

All staff and students routinely working in radiation areas must wear a dosimeter. A dosimeter is used to measure the amount and type of radiation received by the wearer over some time (typically 3 months). Dosimeters do NOT protect or shield anyone from radiation exposure; they merely inform how much radiation (if any) the wearer received.

The dosimeters are purchased from a commercial vendor contracted by Washtenaw Community College. Dosimeters are provided to the radiography students at no cost. The radiography program director will order and distribute the dosimeters. Each student enrolled in the radiography program will be issued two dosimeters, one waist, and one collar, on a quarterly (3-month) basis during the two-year program. The quarters begin in August, November, February, and May.

Dosimeter Exchange Cycle

Dosimeters must be exchanged promptly at the beginning of each quarter. The dosimeters should be on campus the first week of each designated quarter: August, November, February, and May. The program director will announce when the new badges have arrived and students will have one week to exchange badges. If badges are not exchanged when requested, the student will not be permitted to attend his/her clinical site until the badges are exchanged and then will be required to make up the clinical time. Clinical time missed due to this is considered an unexcused absence.

Investigational/Action Dose Limits

In an attempt to follow the guidelines of the ALARA concept of radiation exposure, investigational/action limits have been established for the maximum permissible radiation exposure of faculty and students that are below federal and state regulations. The following investigational/action limits have been established for radiation exposures which, when exceeded, will initiate an investigation and corrective action by the program director and clinical coordinator.

Action Level 1: Radiation dosimeter readings that equal or exceed the quarterly dose equivalent level of 0.125 rem (125 millirems) will require the student to have a counseling session with the program director and clinical coordinator.

Action Level 2: Radiation dosimeter readings that exceed the quarterly level of 0.375 rem (375 millirems) will require the student to submit a written history of their clinical activities to be reviewed by the program director and clinical coordinator. If it has been determined that the student is performing unsafe practices in the clinical setting, the student will incur a Group II violation and will be placed on Clinical Probation.

Students will be reminded that deliberate violations of the Radiography program's radiation safety guidelines is a Group I Violation and could result in the student failing his/her clinical course for that semester.

Monitoring Radiation Exposure

Student radiation exposure will be monitored during the entirety of the program and will be maintained by the program director. At the end of each quarter, dosimeters will be collected by the program director and returned to the commercial vendor for processing and analysis. After processing the vendor will generate a dosimeter report for each student. Upon receipt of the quarterly dosimeter report, the program director will review each student's exposure report to ensure compliance with the investigational/action dose limits established for the program and then post the report for students to read and initial. The student will also acknowledge they have viewed the report by signing a digital form in Trajecsys. If any student meets or exceeds the program's investigational dose limits, the program director and clinical coordinator will meet with the student to determine the cause and an action plan will be developed to ensure that the student is following the proper radiation protection protocols.

The program director will maintain the dosimeter reports indefinitely. The dosimeter reports

are treated as confidential and will not be released to other individuals or organizations without the written permission of the individual student. Students may request a copy of their dosimetry report at any time by submitting a written request to the program director.

How to Wear a Dosimeter

Each student will receive two (2) whole-body dosimeters, one designated as the collar badge and the other as the waist badge. The collar and waist badges must be worn on the appropriate area with the label facing out. The proper placement of each dosimeter is depicted on the front of each badge. During fluoroscopic procedures, the collar dosimeter is worn outside of the lead apron, and the waist dosimeter is worn underneath the lead apron. Wearing the collar and waist dosimeters consistently in the proper locations is critical to obtaining an accurate radiation exposure report.

Use and Care of Dosimeters

Each student to whom dosimeters are issued has the responsibility to ensure their proper use and care. Below is a listing of the proper use and care of the dosimeters.

1. Dosimeters must be worn in the radiology department at assigned clinical sites and during laboratory courses on campus. Any student who reports to a clinical site or a laboratory course session without the proper dosimeter will not be permitted to use the radiation- emitting equipment.
2. Dosimeters are issued to individual students and may not be worn by anyone other than the person whose name is on the badge. Do not wear someone else's badge or loan your badge to another person.
3. Dosimeters must always be placed in a plastic holder and worn with the labeled side facing away from the body. Never remove the radiation badge from its laminated pouch.
4. Dosimeters must be worn on the designated body location as indicated on the front of the badge. One dosimeter should be worn on the collar and the second on the waist. Wearing dosimeters incorrectly can result in false dose measurements.
5. In procedures that require a lead apron to be worn (e.g., fluoroscopy and C-arm), the waist badge is worn under the lead apron, and the collar badge is worn outside of the lead apron. This is done to monitor the effectiveness of the shielding and the exposure to unshielded areas such as the head, neck, and extremities.
6. Dosimeters must not be shielded by an employee identification badge, anatomic markers, pens, buckles, buttons, tape, etc.
7. Do not leave your dosimeters in an x-ray room.
8. Store dosimeters in a low radiation background area, away from excessive moisture and heat, when not worn. Do not leave dosimeters on the dashboard of your car.
9. Accidental exposure to a dosimeter, (i.e., left in a radiographic room on an apron) must be reported to the program director immediately.
10. Pin holes, water, pressure, chemicals, and heat can damage the dosimeter and prevent the evaluation of the dose. Always remove dosimeters from your uniform before laundering the uniform.
11. If your dosimeters become contaminated, damaged, or lost, you must immediately submit a written request for a replacement to the program director and may be subject to a

$25 replacement fee.

12. Do not wear your dosimeters when you receive medical or dental x-rays or undergo radiation therapy treatments or nuclear medicine studies.
13. Do not wear your dosimeters through the airport, baggage screening, or in flight.
14. Exchange your dosimeters promptly. Time gaps make the analysis more difficult, and less accurate, and reduce the legal and historical value of the reports.

Pregnancy Policy

The increased sensitivity of rapidly dividing cells makes the human embryo and fetus particularly susceptible to injury from exposure to ionizing radiation. For this reason, the Nuclear Regulatory Commission (NRC) regulations, 10 CFR Part 20, requires that the radiation dose to an embryo/fetus does not exceed 0.5 rem (500 mrem) for the entire gestation period, of a declared pregnant worker (10% of the occupational dose limit for adults).

It is up to the pregnant student to decide whether or not she will formally declare her pregnancy. For the occupational exposure limits for an embryo/fetus to apply, a pregnant student must voluntarily declare her pregnancy, in a written and signed statement, to the program director. The written declaration of pregnancy must include the estimated date of conception (e.g., only the month and year need to be provided). The declaration of pregnancy may be withdrawn at any time by a signed, dated, written statement of withdrawal submitted to the program director.

If a student chooses to declare her pregnancy the program director will meet with the declared pregnant student to provide counseling regarding the risks of radiation exposure to the embryo/fetus and additional measures to be taken to protect the embryo/fetus. The student will be given a copy of the NRC Regulatory Guide 8.13 Instructions Concerning Prenatal Radiation Exposure, which provides additional regulatory information and questions and answers concerning prenatal radiation exposure. The program director will also discuss the following options for completing the program:

1. The declared pregnant student may remain in the program and perform her assigned clinical rotations just as a non-pregnant student. A fetal dosimeter will be provided to the declared pregnant student and will be monitored monthly. The fetal dosimeter should be worn at the waist level and under any protective apron at all times while in the clinical education setting.
2. The declared pregnant student may discontinue her clinical education and continue in the didactic component of the program during the pregnancy. Students must fulfill the clinical hours that were missed during their pregnancy to meet program completion requirements. Upon receiving a release from her doctor to resume clinical training, the student will collaborate with the Clinical Coordinator to develop a schedule for making up the missed hours.
3. The declared pregnant student may elect to take an excused pregnancy leave from the program for one year and be readmitted the following year. The student will be given credit for all college work completed but must register for a RAD 189 course

the semester before reentering the program to evaluate her clinical competency level.

4. If a declared pregnant student does not return to the program after one year, she must reapply to the program and the need to repeat previously completed coursework will be reviewed on a case-by-case basis.

If you are pregnant or believe you may be pregnant, contact the program director. All inquiries will be kept in confidence.

Returning Dosimeters at the End of the Program

The dosimeters issued to students during the program are the property of Washtenaw Community College. All dosimeters must be returned or accounted for before a student will be permitted to graduate. Failure to return dosimeters upon completion of the program will prevent a student from taking the American Registry of Radiologic Technologist (ARRT) radiography certification examination.

Radiation Safety Rules

Students must safely perform radiographic examinations according to the ALARA principle utilizing the three cardinal rules (time, distance, and shielding) of radiation protection and provide patient and personnel protection from ionizing X-rays by practicing the following:

No student will perform a radiographic exposure on any person that has not been ordered by a physician.

Radiography Lab (OE 121) Radiation Safety Rules

- When operating the radiographic equipment in the radiography lab (OE 121), students must always remember the cardinal rules of time, distance, and shielding.
- Student utilization of energized labs (OE 121) must be under the supervision of a qualified radiographer who is readily available.
- All faculty and students are required to wear their dosimeters while operating the fixed and mobile energized radiographic equipment in the radiography laboratory (OE 121).
- The radiographic equipment shall be properly “warmed up” before use as directed by program faculty.
- When operating the fixed energized radiographic equipment, students shall make exposures only while standing in the shielded area behind the control panel and no student or faculty is to be in the x-ray room while the exposure is being made.
- When operating the mobile energized radiographic equipment, students shall make exposures only while wearing a lead apron and standing at least 6 feet from the radiation source. No student or faculty is to be in the patient room while the exposure is being made.
- All doors must be closed to each radiographic room when making an exposure and no one may enter an x-ray room while exposure is being made.
- No individual shall be exposed to ionizing radiation for training or demonstration purposes in the radiography lab (OE 121). The use of ionizing radiation on humans

is strictly regulated and is only permitted with authorization from a licensed physician.

- Students shall use the exposure factors posted by the instructor for each lab session.
- Only those images authorized by an instructor may be exposed to an x-ray manikin in the lab.
- If a problem arises while attempting to make an exposure, the student is to seek help from the instructor.
- If any repeats are necessary, the student is to seek help from the instructor before attempting the repeated exposure.
- Images must be processed according to the criteria specified by the instructor.
- Students shall immediately report any equipment malfunctions to the instructor.
- Persons who are under eighteen years of age are not allowed into the radiography lab while the energized radiographic equipment is being used.
- Any violations of the safety policies of the radiography lab will result in disciplinary action and may result in dismissal from the radiography program.
- All energized radiographic equipment is to be switched off at the mains and locked by faculty when not in use for laboratory sessions.
- Food and drink are not permitted in the x-ray rooms.

Clinical Radiation Safety Rules

Students must safely perform radiographic examinations according to the ALARA principle utilizing the three cardinal rules (time, distance, and shielding) of radiation protection and provide patient and personnel protection from ionizing x-rays by practicing the following: Students will sign a Radiation Safety Agreement in Trajecsys before beginning clinical education **(Appendix C).**

- Students are required to wear their assigned dosimeters for all hours spent in clinical education. One badge should be worn on the waist and the second on the collar. Care should be taken not to shield the badges with pens, buckles, buttons, tape, etc.
- Any student who reports to their clinical assignment without the proper radiation-monitoring device will not be permitted to use radiation-emitting equipment.
- When operating fixed energized radiographic equipment, students shall make exposures only while standing in the shielded area behind the control panel with doors closed.
- No one may enter an x-ray room while exposure is being made.
- No individual shall be exposed to ionizing radiation for training or demonstration purposes at the clinical site.
- Students should never perform a radiographic procedure on any person if it has not been ordered by a physician.
- Exposure factors must produce the minimum amount of exposure needed to obtain a diagnostic radiograph.
- Gonadal shielding and collimation must be used for each exposure according to ALARA per site protocol.
- All female patients of childbearing age must be asked if they are or could be pregnant before starting the radiographic procedure.

- If a problem arises while attempting to make an exposure at the clinical education site the student is to seek help from the supervising radiologic technologist.
- If any repeats are necessary at the clinical education site the student is to seek help from the supervising radiologic technologist before attempting the repeated exposure and all repeat images must be taken under the direct supervision of a registered radiologic technologist.
- Students shall immediately report any equipment malfunctions to the supervising radiologic technologist.

Fluoroscopy Radiation Safety Rules

- When assisting with fluoroscopic procedures, the students must wear a lead apron and other radiation protection devices, such as a thyroid shield and leaded gloves should remain at least two feet away from the x-ray table during fluoroscopy. It is the student's responsibility to make certain that all personnel are properly protected with lead aprons, shields, etc before operating the fluoroscopic equipment.

Mobile Radiography Radiation Safety Rules

When performing mobile examinations, the student

- wears a lead apron when the exposure is being made
- and must stand at least six feet from the x-ray source.
- instruct anyone who is not required to be in the room to leave the area. Anyone who is not able to leave the room (and within 6 feet) must be provided with protective shielding. Inform anyone who left the area when you are finished.
- must announce in an audible voice "x-ray" before making an exposure.

Immobilizing Patients and Image Receptors During an Exposure

- WCC radiography students must NEVER hold a patient or an image receptor for any radiographic examination exposure under ANY circumstances.
- Pregnant women or minors must never assist in holding a patient or an image receptor during an exposure.
- Individuals who assist in holding a patient must be provided with appropriate shielding.

Violation of the Radiography program's radiation safety guidelines is a Group I Violation under "Unsafe Practice of the Profession" and could result in the student failing his/her clinical course for that semester!

Radiography Student Magnetic Resonance Imaging (MRI) Safety Policy

Students must be aware of the Magnetic Resonance Imaging (MRI) safety protocols before entering the MRI environment. It is important to remember that even when the MRI scanner is not in use, the magnet is always on, 24 hours per day, 365 days per year. The MRI scanner generates a very strong magnetic field that extends beyond the bore of the magnet in all directions and magnetically susceptible (e.g., ferromagnetic) objects and devices even at a distance can become accelerated into the bore of the magnet with force sufficient enough to cause serious injury or damage to equipment, patient, and any personnel in its path.

Before the first year of clinical training, students will receive Magnetic Resonance Imaging (MRI) safety training and must complete the required screening form during their mandatory clinical orientation session with the WCC Clinical Coordinator. During this meeting, students will be given a copy of the program's MRI safety policy and a screening form **(Appendix E)** to review. Students will then be required to complete and electronically sign the screening form via the program's Trajecys
system. Students will receive this safety policy and screening again before beginning their second year of clinical training and will electronically sign the screening form via the program's Trajecys system.

Every person who enters the MRI room must be screened for possible contraindications that could affect their health and safety. Metallic fragments embedded in the body such as bullets or shrapnel could change position when exposed to the strong magnetic field and cause injury. The magnetic field of the scanner can also damage an external hearing aid or cause a heart pacemaker and other implanted devices to malfunction. Therefore, students must make safety a top priority while in the MRI environment and strictly follow the MRI safety rules listed below:

- Students must be under the immediate supervision of a qualified MRI technologist while in the MRI environment.
- Students should never enter the MRI scan room without first being cleared by a qualified MRI technologist.
- All students are required to undergo the hospital personnel MRI screening process before entering the MRI environment to prevent MRI-related accidents or injuries. **During the screening process, students are required to disclose if they have any of the following indwellings and/or medical devices:** ***(Note: this is not an exhaustive list of examples)***
    - Medical implants such as a cardiac pacemaker or implantable cardioverter/defibrillator, neurostimulator, aneurysm clips, penile implant, orthopedic implant, cochlear or otologic implants.
    - Foreign objects that are ferromagnetic (e.g., bullets, shrapnel, BBs) from industrial or military injuries.
    - Medication patches that contain metal foil (i.e. transdermal patch)
- A student will not be permitted to complete an MRI specialty rotation if the hospital personnel's MRI screening process indicates that the student is at risk.
- Students in good academic and clinical standing will be permitted to complete a specialty rotation in Magnetic Resonance Imaging (MRI) during the final semester of clinical training if the hospital screening indicates that the student is not at risk.
- The student must remove all metallic (e.g., ferromagnetic) personal belongings and place them in the designated storage area before entering the MRI environment. **Students should never take the following ferromagnetic objects and/or devices into the MRI scan room:** ***(Note: this is not an exhaustive list of examples)***
    - Loose metallic objects such as cell phones, pagers, external hearing aid, keys, glasses, jewelry (i.e., watches, necklaces, pins, rings, tie clips), safety pins, paper clips, purses, money clips, coins, pens, pocket knives, nail

clippers, tools, clipboards, cigarette lighters.
    - Hairpins, barrettes, and hair extensions that are bonded or tied to the hair using metal clips.
    - Credit/bank cards and all other cards with magnetic strips.
    - Any article of clothing that has a metallic zipper, buttons, snaps, hooks, belt buck, or under-wires.
    - Steel-toed boots/shoes.
- Only medical devices and equipment that are MRI-compatible (e.g., anything that does not contain iron) are permitted in the MRI scan room. All patient transport devices (e.g.,
  wheelchairs, gurneys), oxygen tanks, anesthesia/ventilation carts, IV pumps, pulse oximeters, etc., must be MRI-safe.
- Students must never assume an object or device is MRI-compatible. If the compatibility of an object or device is in question do not take it in the MRI scan room. Ask a qualified MRI technologist to confirm the safety of the object or device.
- Students must strictly adhere to all MRI departmental Zone regulations:
- Zone 1: This region includes all of the areas outside of the MR environment, which is freely accessible to the general public (e.g., the reception and waiting area, and the corridors and entrances just outside the MR environment).
- Zone 2: This area is an interface between Zone 1 (free access) and Zone 3 (strictly controlled) where patient interviews and preparation are performed.
- Zone 3: This area is under the strict control of qualified MRI personnel. Zone 3 includes the MRI control area and may also include supply and equipment storage areas and a computer room. Access to Zone 3 is usually physically restricted from the general public and other healthcare workers through the use of a locking system (e.g., key lock, electronic access control).
- Zone 4: This area is the actual MR scanner room, which contains the magnet. Access to this Zone is strictly limited to qualified MRI personnel, patients undergoing scans, and appropriately screened healthcare workers. Zone 4 is clearly marked by a sign stating, “The Magnet is Always On.” No one enters Zone 4 without the approval of a qualified MRI technologist.
- Pregnant students are permitted in and around the MR environment throughout all stages of their pregnancy but they are not allowed to remain in the MR scan room during the actual scanning.

Radiographic Markers

Students are required to purchase and use their radiographic markers when practicing in the energized labs on campus or performing procedures in the clinical setting. The program director will provide information for ordering radiographic markers. It is recommended that two to three sets of markers be purchased by the student; one set is to be kept in the radiography lab - the other at the clinical site.

Student Employment

The curriculum content and time required for completion of the radiography program is such that any full-time employment by the student is virtually impossible and strongly discouraged.

The faculty realizes that many students will be employed part-time while completing the program. Lack of attendance due to part-time employment may negatively affect the student's ability to be successful in the program. If a student is employed in some capacity by the CEC they are assigned to or if the student is employed as a part-time/student radiographer by the affiliated site, then this employment must take place outside of the designed weekly program clinical hours. The hours accrued during a student's part-time work cannot be counted toward their clinical time. Nor can students acquire clinical competencies during scheduled work hours. All designated program clinical hours are unpaid and all clinical competencies must be obtained during scheduled clinical hours.

Vacation Time

The students are allotted personal vacation time following the Washtenaw Community College academic calendar as it relates to holidays and breaks between or during semesters. Students are not permitted to take vacation time during the scheduled classes/labs and clinical assignments. Students who are found to be missing clinical time for a vacation will have their clinical course grade reduced by one letter grade for every eight hours missed and will be subject to other Group II violations.

APPENDICES

Appendix A: Annual Assessment Data: Graduate Class of 2022

WCC RADIOGRAPHY PROGRAM ANNUAL ASSESSMENT DATA: Graduate Class of 2022

Mission Statement: The mission of the Radiograph Program is to provide an accredited two-year associate degree program that will prepare graduates for an entry-level career in the field of diagnostic medical imaging.

Program Goals
Goal 1: Clinical Competency: Students will demonstrate proficiency in technical and clinical skills.
Goal 2: Critical Thinking: Students will demonstrate critical thinking and problem-solving skills.
Goal 3: Communication Skills: Students will demonstrate the ability to effectively communicate orally and in writing.
Goal 4: Professional and Ethical Principles: Students will demonstrate the ability to analyze and address ethical and medical issues in patient care while exhibiting professionalism in the clinical setting.

Goal 1: Clinical Competency: Students will demonstrate proficiency in technical and clinical skills.

	Student Outcomes	Assessment Tool	Benchmark	Timeline	Faculty Responsible	Results per Academic Year/Class	Analysis/Recommendations
1.1	Students will perform diagnostic radiographic procedures.	RAD 120 - Final Clinical Performance Evaluation: Technical Aptitude – 3rd statement **"Demonstrates proper manipulation of radiographic / fluoroscopic / portable equipment including tube, SID, table movement / locks / tube / bucky alignment"**	Average score ≥ 3 (1 – 4-point scale) Average score ≥ 4 (1 – 5-point scale)	First Year, 3rd semester (Winter)	Clinical Coordinator	2018 - 2019: Average score 3.6 12 students 55%) received a score of 4 6 students (27%) received a score of 3 4 students (18%) received a score of 3.5 Class of 2020: Average score 3.6 12 students 55%) received a score of 4 6 students (27%) received a score of 3 4 students (18%) received a score of 3.5 Class of 2021: No data due to COVID-19 restrictions **Class of 2022: Average score 4.18** 9 students (41%) received a score of 5 8 students (36%) received a score of 4 5 students (23%) received a score of 3	The assessment of student learning outcomes (SLO) 1.1, which centers on performing diagnostic radiographic procedures, has been evaluated using the RAD 120 Final Clinical Performance Evaluation. This evaluation specifically assesses students' technical aptitude in handling various radiographic, fluoroscopic, and portable equipment, including the correct manipulation of the tube, source-to-image distance (SID), table movement, locks, and tube/bucky alignment. During the 2018-2019 academic year, which also corresponds to the Class of 2020, students achieved an average score of 3.6. Within this group, 55% of students (12 individuals) received a score of 4, indicating a competent level of proficiency, while 27% (6 students) scored 3, and 18% (4 students) received a score of 3.5. This level of performance demonstrated consistency among the students as they progressed through the program. The Class of 2021 was unable to provide performance data due to COVID-19 restrictions, creating a gap in the assessment timeline. However, the Class of 2022 demonstrated a noteworthy improvement in their technical skills. This cohort achieved an average score of 4.18 on the newly implemented five-point scale for assessments, reflecting a high level of competency in their abilities. In this class, 9 students (41%) received a perfect score of 5, indicating exceptional proficiency, while 8 students (36%) earned a score of 4, showing solid understanding and capability. Additionally, 5 students (23%) received a score of 3. Overall, the data for the Class of 2022 indicates a positive trend in student performance regarding diagnostic radiographic procedures. No changes were recommended for this assessment tool during the last review.
		RAD 150 - Radiographic Positioning Simulation Exercises (Spinal Column)	Students will achieve a score of 90% or higher	First Year, 4th semester (Spring/Summer)	Clinical Coordinator	2017 -2018:Average score 97% 2018 -2019: Average score 97% Class of 2020: Average score 97% Class of 2021: No data – campus closed **Class of 2022: Average score 98%**	The assessment of students' performance in diagnostic radiographic procedures, specifically through the RAD 150 - Radiographic Positioning Simulation Exercises focused on the spinal column, showcases exceptional academic achievement over several years. From 2017 to 2019, students consistently attained an impressive average score of 97%, indicating a high level of competency in radiographic positioning skills related to spinal assessments. This consistent performance underscores the effectiveness of the instructional methods and the student's ability to apply their knowledge in practical scenarios. The Class of 2020 also maintained this high standard with an average score of 97%. However, there was a gap in data for the Class of 2021 due to campus closure, which temporarily interrupted evaluations. Returning to assessments, the Class of 2022 demonstrated a remarkable improvement, achieving an average score of 98%. Overall, the gathered data highlights strong and consistent performance in radiographic positioning simulation exercises among students, reflecting both their dedication to mastering essential skills in radiography and the program's continued emphasis on high-quality education and training. The increase in average score for the Class of 2022 suggests an ongoing enhancement of the curriculum and training effectiveness, ensuring students are well- prepared for their future roles in the clinical setting. *Faculty have decided to adopt a new assessment method for SLO 1.1 in response to the consistently high performance evidenced by past student cohorts in the RAD 150 - Radiographic Positioning Simulation Exercises. By incorporating simulation exercises for the upper extremities, lower extremities, and spinal column, the faculty aim to provide a more comprehensive evaluation of students' competencies across diverse radiographic positioning scenarios. This holistic approach not only aligns with the program's commitment to high-quality education but also enhances students' learning experiences by integrating varied practical applications. Moreover, it enables faculty to effectively measure and elevate students' skills in all critical areas of radiography, ensuring they are well-prepared for diverse clinical challenges. Such a rationale emphasizes continuous improvement in curriculum design while maintaining rigorous academic standards.*

		RAD 240 - Final Clinical Performance Evaluation: Competency Maintenance – 2nd statement **"When the student is involved in procedures previously mastered, the student is able to perform the exam perform the exam with minimal assistance"**	*Average score ≥ 3 (1 – 4-point scale) +Average score ≥ 3.5 (1 – 5-point scale)	Second Year, 7th semester (Spring/Summer)	Clinical Coordinator	*2017 - 2018: Average Score 4 (22 students received a score of 4) *2018 - 2019: Average score 3.9 20 students (87%) received a score of 4 3 students (13%) received a score of 3 Class of 2020: No data – Students unable to attend clinical +Class of 2021: Average score 5 21 students (100%) received a score of 5 **+Class of 2022: Average score 4.82** 17 students (85%) received a score of 5 2 students (10%) received a score of 4 1 student (5%) received a score of 3	The assessment of student performance in diagnostic radiographic procedures, particularly through the RAD 240 - Final Clinical Performance Evaluation focusing on competency maintenance, reveals a compelling trajectory of skill development over consecutive years. This specific evaluation measures the student's ability to perform previously mastered procedures with minimal assistance, which is critical for their readiness for independent practice. In the academic year of 2017-2018, students achieved an average score of 4, with all 22 students demonstrating proficiency by receiving this score. The following year, 2018-2019, saw a slight decline, with an average score of 3.9; however, the data still indicated that a strong majority—87% of the students—scored 4, while 13% scored 3, suggesting that most students maintained a solid level of competency despite the dip. The Class of 2020 experienced a gap in data due to student unavailability for clinical attendance. However, the Class of 2021 showed a remarkable recovery, achieving a perfect average score of 5, with all 21 students reaching this highest standard, reflecting outstanding proficiency in performing the necessary procedures without assistance. Continuing this positive trend, the Class of 2022 also performed admirably with an average score of 4.82. In this cohort, 85% of the students received a score of 5, indicating a high level of competence, while 10% scored 4 and 5% scored 3, demonstrating a solid grasp of the skills necessary for effective radiographic procedures. Overall, the data highlights a substantial improvement in students maintaining competencies over the years, especially evident in the Classes of 2021 and 2022, showcasing the program's effectiveness in cultivating practical skills among its students. The consistently high scores reflect not only the students' dedication but also the strong emphasis on maintaining procedural competencies as they progress through the program. No changes were recommended for this assessment tool during the last review.
1.2	Students will demonstrate the ability to perform basic patient care assessment skills.	RAD 222 Patient Assessment Skills Check-Out Form: Venipuncture	*On a sampling of the Patient Assessment Skills Check Out Form, 90% of students will achieve a passing grade on the venipuncture skills checkout form. +Average score ≥ 17 (total points 20)	Second Year, 5th semester (Fall)	RAD 222 Instructor	2017 - 2018: Average score 20 2018 - 2019 Average score 20 Class of 2020 Average score 20 Class of 2021 Average score 20 **Class of 2022 Average score 20** 21 students (100%) received a score of 20	The assessment of student's abilities to perform basic patient care assessment skills, particularly through the RAD 222 Patient Assessment Skills Check-Out Form focusing on venipuncture, indicates a remarkable consistency in performance over the years. From the academic year 2017-2018 through to the Class of 2022, students consistently achieved an average score of 20. This uniformity in scoring suggests that the students have developed a strong competency in performing venipuncture, an essential skill in patient care for healthcare professionals. The stability of the average score across five consecutive years reflects the effectiveness of the training and educational strategies implemented in the program. It indicates that students are not only meeting but maintaining high standards of proficiency in this critical skill area. *Faculty have decided to adopt a new assessment method for SLO 1.2 in the RAD 222 course to enhance the evaluation of essential patient assessment skills among students. While the consistent average score of 20 over multiple years reflects strong competency in venipuncture, the decision to include the assessment of vital signs—specifically blood pressure, pulse, and respiration—aims to broaden the scope of clinical skills evaluated. This change addresses the critical nature of comprehensive patient assessment in healthcare settings and ensures that students are proficient in a wider range of skills necessary for effective patient care. By setting a benchmark score of 95%, the faculty reinforces their commitment to high standards and excellence in the educational experience, ultimately preparing students to meet the diverse demands of the healthcare environment.*
		RAD 101: Patient Transfer Competency Form	+Average score ≥ 32 (total points 39) *Average score ≥ 27(total points 33	First Year, 1st semester (Spring/Summer)	RAD 101 Instructor	2017 - 2018: Average Score 37 +2018 - 2019: Average Score 37 +Class of 2020: Average Score 37 +Class of 2021: Average Score 38 ***Class of 2022: Average Score 31.6** 10 students (33%) received a score of 33 9 students (30%) received a score of 32 3 students (10%) received a score of 31 6 students (20%) received a score of 30 2 students (7%) received a score of 29	The assessment data for the basic patient care assessment skills, as measured by the RAD 101 Patient Transfer Competency Form, reveals important trends across multiple cohorts. From the academic years 2017 to 2021, students consistently demonstrated competency with average scores of 37, indicating a stable level of proficiency in performing patient care assessments. Notably, the Class of 2021 achieved a slight improvement, recording an average score of 38, reflecting a positive trend in student performance. Following the Class of 2021, Mr. Nelson made a pivotal change to the scoring system, adjusting the total possible points from the previous evaluation structure of 39 points to a maximum of 33 points. Subsequently, the Class of 2022 had an average score of 31.6 under this revised scoring system. It is essential to recognize that this average reflects a modification in the evaluation criteria, rather than a decline in skill retention. The data reveals that while a portion of the class did score lower than expected, there still exists a foundation upon which to build. Efforts made under the new scoring system may illustrate the complexities of transitioning to a different evaluation method. For example, although 33% of students scored 33, and 30% scored 32, it indicates that a significant number of students were able to achieve scores near the top of the assessment scale, showcasing their competencies. Furthermore, with 10% scoring 31 and only a small percentage scoring below 30, there exists an opportunity to provide targeted support and interventions to enhance understanding and application of patient care assessment skills for those struggling. Moving forward, it will be crucial to analyze the impact of this scoring modification over the coming years and to continue implementing strategic interventions for future cohorts. By fostering a supportive learning environment, we can ensure that all students enhance their competencies and performance in patient care assessments, building on the positive trajectory established in previous cohorts.
	Goal 2: Critical Thinking: Students will demonstrate critical thinking and problem-solving skills.						
	Student Outcomes	**Assessment Tool**	**Benchmark**	**Timeline**	**Faculty Responsible**	**Results per Academic Year/Class**	**Analysis**

2.1	Students will calculate the correct exposure factors.	RAD 217 Radiographic Technique Manual Project - 1. Upper and lower extremities, 2. Skull procedures, and 3. Spinal Column, Chest, Abdomen, Ribs, and Sternum	Average score of 90% or better (100 points) - Combined average score of 3 assignments	Second Year, 5th semester (Fall)	Clinical Coordinator	2017 – 2018: Average score 96% 2018 - 2019: Average score 99% Class of 2020: Average score 97% Class of 2021: Average score 96% **Class of 2022: Average score 97.6%**	The assessment of student learning outcomes for SLO 3.1, which focuses on the calculation of correct exposure factors, has been consistently strong over the years. Through the RAD 217 Radiographic Technique Manual Project, students engaged in three significant assignments covering upper and lower extremities, skull procedures, and the spinal column, chest, abdomen, ribs, and sternum. The benchmark for success was set at an average score of 90% or better across these assignments. The data reflects impressive performance: in the 2017-2018 academic year, the average score was 96%. This score showed a remarkable improvement in the following year, with students achieving an average of 99% in 2018-2019. The trend of high performance continued with the Class of 2020, who recorded an average score of 97%, followed closely by the Class of 2021 with an average of 96%. The most recent data from the Class of 2022 indicates an average score of 97.6%. Overall, the assessment outcomes highlight the effectiveness of the program and students' proficiency in calculating exposure factors, maintaining an average combined score significantly above the benchmark and illustrating a trend of sustained excellence across multiple cohorts. No changes were recommended for this assessment tool.
		RAD 124 Lab Assignment Effect of Distance on Density/Density Maintenance Formula	Average score ≥ 20 (26 points)	First Year, 2nd semester (Fall)	RAD 124 Instructor	2017 - 2018: Average score 22.58 2018 - 2019: Average score 22.25 Class of 2020: Average score 22.25 Class of 2021: Average score 23.9 **Class of 2022: Average score 24** 3 students received a score of 27 – extra credit for superior answers 7 students received a score of 26 4 students received a score of 24 1 student received a score 19 2 students received a score of 0	The assessment of students' ability to apply the principles of distance and density/exposure maintenance formula through the RAD 124 Lab Assignment demonstrates a positive trend in performance over the years. The average scores began at 22.58 for the 2017-2018 academic year, with a slight decline to 22.25 in 2018-2019 (Class of 2020). However, there was a notable improvement in the Class of 2021, which achieved an average score of 23.9, followed by another increase to an average of 24 for the Class of 2022. These results indicate an overall upward trajectory in students' understanding of density maintenance and the effects of distance on radiographic exposure. The data also reveals that several students excelled in their performance, with 3 students receiving a perfect score of 27 due to extra credit for superior answers and 7 others achieving scores of 26. Additionally, 4 students scored 24, demonstrating a solid grasp of the material. However, the presence of 1 student scoring 19 and 2 students receiving a score of 0 highlights areas where further support may be needed. Overall, the consistent improvement in average scores across the classes suggests that instructional strategies are effectively enhancing students' comprehension of critical concepts in radiography, preparing them for future applications in the field. Faculty did discuss the possibility of replacing this assessment tool, but that will be considered during the next assessment cycle.
2.2.	Students will solve problems in the clinical setting.	Radiography Student Professional Skills Evaluation Question – 6 **"The student demonstrates the ability to think critically and solve problems or challenges with which he/she is confronted."**	*Average score ≥ 4 (1 – 5 point scale) +Average score ≥ 3 (1 – 4-point scale)	Annually in June	Clinical Coordinator	*2017 - 2018: Average score 4.9 (5-point scale used in this year) 20 students (91% received a score of 5 2 students (9%) received a score of 4 +2018 - 2019: Average score 3.8 18 students (78%) received a score of 4 5 students (12%) received a score of 3 +Class 2020: Average score 3.8 18 students (82%) received a score of 4 4 students (18%) received a score of 3 + Class of 2021: Average score 3.8 12 students (80%) received a score of 4 3 students (20%) received a score of 3 **+2022: Average score 3.77** 15 students (75%) received a score of 4 1 student (5%) received a score of 3.67 4 students (20%) received a score of 3	The assessment of students' problem-solving abilities in the clinical setting, as evaluated through the Radiography Student Professional Skills Evaluation, illustrates a strong foundation in critical thinking skills across several academic years, particularly following the change to a 4-point scoring system. In the 2017-2018 academic year, students achieved an impressive average score of 4.9 on a 5-point scale, with 91% of participants attaining the highest score of 5. After the transition to a 4-point scale, the average scores remained stable, reflecting consistent performance among students. In the subsequent years—2018-2019, 2019-2020, and 2020-2021—the average scores stabilized at 3.8, with a solid proportion of students (between 80% and 82%) continuing to achieve a score of 4. In 2022, the trend persisted with an average score of 3.77, where 75% of students scored 4. These results suggest that despite the scoring scale change, students effectively demonstrated their ability to think critically and address challenges in clinical settings. The consistent performance indicates a strong understanding of problem-solving skills, reinforcing the effectiveness of the program in preparing students for real-world applications in radiography. No changes were recommended for this assessment tool.
		RAD 225 Final Evaluation (Judgment/Accountability 8th Statement **"The student demonstrates the ability to think critically and solves problems or challenges as they arise"**	#Average score ≥ 3 (1 - 4-point scale) ^Average score ≥ 3.5 (1 - 5-point scale)	Second Year, 6th semester (Winter)	Clinical Coordinator	#2017 - 2018: Average score 3.5 16 students (76%) received a score of 4 4 students (19%) received a score of 3 1 student (5%) received a score of 2 #2018 - 2019: Average score 3.8 18 students (78%) received a score of 4 5 students (12%) received a score of 3 #Class 2020: Average score 3.6 8 students (36%) received a score of 4 14 students (64%) received a score of 3 ^Class of 2021: Average score 4.73 16 students (76%) received a score of 5 4 students (19%) received a score of 4 1 student (5%) received a score of 3 **^Class of 2022: Average score 4.55** 12 students (60%) received a score of 5 7 students (35%) received a score of 4 1 student (5%) received a score of	Over the span of three academic years, the average scores for students remained relatively consistent, ranging from 3.5 to 3.8. The majority of students typically received scores of 4, showcasing a strong performance across the board. While there was a slight improvement in average scores from 2017-2018 to 2018-2019, there was a slight decrease in scores for the Class of 2020. For the Class of 2021, students achieved an impressive average score of 4.73. This high performance was underscored by 76% of students attaining a perfect score of 5, demonstrating exceptional critical thinking and problem-solving abilities. Additionally, 19% of the students received a score of 4, while only 5% scored a 3, indicating that nearly all students displayed a strong capacity to address challenges effectively. The Class of 2022 maintained a solid performance, with an average score of 4.55. In this cohort, 60% of students also achieved the top score of 5, while 35% received a score of 4, and again, only 5% scored a 3. The consistency in high scores reflects the program's commitment to preparing students for the complexities of clinical practice and their ability to think critically under pressure. The data underscores the program's success in fostering essential problem-solving skills, equipping students for their future roles in the field of radiography. No changes were recommended for this assessment tool.
	Goal 3: Communication Skills: Students will demonstrate the ability to effectively communicate orally and in writing.						
	Student Outcomes	**Assessment Tool**	**Benchmark**	**Timeline**	**Faculty Responsible**	**Results per Academic Year/Class**	**Analysis**

3.1	Students will use effective oral communication skills in the clinical setting.	Radiography Student Professional Skills Evaluation - Question 1 **"The student communicates with patients in a manner that you would expect/require of an entry-level radiographer."**	*Average score ≥ 4 (1 – 5 point scale) +Average score ≥ 3 (1 – 4-point scale)	Annually in June	Clinical Coordinator	*2017 - 2018: Average score 4.9 (5-point scale used in this year) 21 students (95%) received a score of 5 1 student (5%) received a score of 4 +2018 - 2019 Average score 3.8 18 students (78%) received a score of 4 5 students (22%) received a score of 3 +Class of 2020 Average score 3.8 18 students received a score of 4 4 students received a score of 3 +Class of 2021 Average score 3.94 20 students received a score of 4 1 student received a score of 3 **+Class of 2022 Average score 3.91** 18 students received a score of 4 1 student received a score of 3.67 1 student received a score of	The assessment of students' effective oral communication skills in the clinical setting, evaluated through the Radiography Student Professional Skills Evaluation, reveals a significant focus on students' ability to communicate with patients in a professional manner expected of entry-level radiographers. In the 2017-2018 academic year, students excelled with an average score of 4.9 on a 5-point scale. Of the 22 students evaluated, a remarkable 95% received the highest score of 5, indicating a high level of competency in patient communication, while 5% scored a 4. Following that year, assessment data transitioned to a 4-point scale, maintaining high standards. In the 2018-2019 academic year, the average score was 3.8, with 78% of students earning a score of 4 and 22% receiving a score of 3. This trend continued in the Class of 2020, which also recorded an average score of 3.8, with 75% of students scoring 4 and 25% scoring 3, indicating a solid standard of performance but also a need for some students to improve their communication skills. In the Class of 2021, the average score increased slightly to 3.94, with 95% of students scoring a 4 and one student scoring a 3, suggesting an improvement in communication abilities. The Class of 2022 maintained strong performance with an average score of 3.91; 90% of students received a score of 4, while one student scored 3.67 and another scored a 3, reflecting minor variations in performance among the cohort. No changes were recommended for this assessment tool during the last review.
		RAD 120 Final Evaluation: Patient Communication – 1st statement **"The student demonstrates the ability to communicate with the patient in a professional manner"**	Average score ≥ 3 (1 – 4-point scale) +Average score ≥ 4 (1 – 5-point scale)	First Year, 3rd semester (Winter)	Clinical Coordinator	2017 – 2018: Average score 3.5 17 students (65%) received a score of 4 6 students (23%) received a score of 3 3 students (12%) received a score of 2 2018 - 2019: Average score 3.7 17 students (71%) received a score of4 7students (29%) received a score of 3 *Class of 2020: Average score 3.7 17 students (71%) received a score of 4 7 students (29%) received a score of 3 Class of 2021: No data due to COVID-19 restrictions **+Class of 2022: Average score 4.27** 12 students (55%) received a score of 5 6 students (27%) received a score of 4 3 students (14%) received a score of 3 1 students (4%) received a score of 1	The assessment of students' effective oral communication skills in the clinical setting, evaluated through the RAD 120 Final Evaluation focused on patient communication, reflects a positive trend in performance over the years. In the 2017-2018 academic year, students achieved an average score of 3.5 on a 5-point scale. Among the 26 students assessed, 65% scored 4, indicating proficiency, while 23% received a score of 3, and 12% scored 2, suggesting there were opportunities for improvement in communication. The following year, 2018-2019 (Class of 2020), saw an increase in the average score to 3.7. In this cohort, 71% of students earned a score of 4, while 29% scored 3, indicating that many students were enhancing their communication skills. In contrast to the previous year, where no data was collected for the Class of 2021 due to COVID-19 restrictions, the Class of 2022 achieved an impressive average score of 4.27 on a 5-point scale. Within this cohort, 55% of students excelled by receiving a top score of 5, demonstrating exceptional communication skills. Additionally, 27% scored 4, indicating a strong grasp of professional communication. Notably,14% received a score of 3, and one student did score a 1, suggesting that while the majority were highly competent, there remains some variability in individual performance. Ms. Hammond will continue to emphasize the importance of this metric when speaking with students during their clinical exit conferences. Overall, the Class of 2022's results underscore a successful recovery and advancement in communication skills after the challenges posed by the pandemic, highlighting the program's effectiveness in preparing students for professional interactions in clinical settings. No changes were recommended for this assessment tool during the last assessment review.
3.2	Students will practice writing skills.	RAD 120 - Contrast Case Study Paper	Average score ≥ 80 points (100- point rubric)	First Year, 3rd semester (Winter)	Clinical Coordinator	2017 - 2018: Average score 97 2018 - 2019: Average score 97 Class of 2020: Average score 97 Class of 2021: Average score 97 **Class of 2022: Average score 97** 6 students received a score of 100 15 students received a score of 98 2 students received a score of 90	The evaluation of student learning outcomes (SLO) 2.2, which emphasizes the development of writing skills, has been assessed through the RAD 120 Contrast Case Study Paper. The data collected from this assessment over several years reveals exceptional performance in students' writing abilities. From 2017 to 2022, the average score for the Contrast Case Study Paper has remained consistently high at 97 across all classes. This remarkable level of achievement indicates not only a strong grasp of writing skills but also an effective instructional approach within the program. Specifically, in the most recent assessment period, the Class of 2022 demonstrated their proficiency with six students achieving perfect scores of 100. Additionally, 15 students scored 98, while two students earned scores of 90. This data highlights that the majority of students are excelling in their writing capabilities, reflecting a sustained commitment to excellence in academic performance. Overall, the results from the RAD 120 assessment underscore the program's success in cultivating strong writing skills among its students, indicating a solid foundation for future academic and professional communication. No changes were recommended for this assessment tool during the last assessment review.
		RAD 225 – Advanced-Level Training Research Paper	Average score ≥ 80 points (100- point rubric)	Second Year, 6th semester (Winter)	Clinical Coordinator	2017 - 2018: Average score 97 2018 - 2019: Average score 94 Class of 2020: Average score 96 Class of 2021: Average score 97 **Class of 2022: Average score 98** 10 students received a score of 100 5 students received a score of 98 4 students received a score of 95 1 student received a score 85	The assessment of students' writing skills through the RAD 225 Advanced-Level Training Research Paper reflects a strong and consistent performance over several academic years. The average scores for the years are impressive: 97 in 2017-2018, followed by a slight decline to 94 in 2018-2019. However, the Class of 2020 rebounded with an average score of 96, and both the Class of 2021 and Class of 2022 showcased notable improvements, achieving averages of 97 and 98, respectively. This positive trend highlights a growing proficiency in writing among the students. The data further reveals that 10 students achieved a perfect score of 100, while an additional 5 students scored 98 and 4 students received a 95, showcasing a cohort of high achievers. While one student scored 85, the overall performance indicates a clear mastery of writing skills within the program. This upward trajectory in average scores suggests that the curriculum is effectively supporting the development of advanced writing abilities in students, preparing them for success in their future professional endeavors. No changes were recommended for this assessment tool during the last assessment review.
	Goal 4: Professional and Ethical Principles: Students will demonstrate the ability to analyze and address ethical and medical issues in patient care while exhibiting professionalism in the clinical setting.						
	Student Outcomes	**Assessment Tool**	**Benchmark**	**Timeline**	**Faculty Responsible**	**Results per Academic Year/Class**	**Analysis**

4.1	Students will recognize the ethical and medical issues in patient care.	RAD 110 writing assignment, Patient/Co-Worker Communication, and Cultural Diversity	Average score of 80 points or better (100 points rubric)	First Year, 1st semester (Fall)	Clinical Coordinator	2017 - 2018: Average score 98 2018 - 2019: Average score 94 Class of 2020: Average score 94 Class of 2021: Average score 85 **Class of 2022: Average score 93** 22 students received a score of 100 2 students received a score of 85 1 student received a score 75 1 student received a score of 0	The assessment of student learning outcomes (SLO) 4.1, which focuses on recognizing ethical and medical issues in patient care, has been evaluated through the RAD 110 writing assignment that addresses Patient/Co-Worker Communication and Cultural Diversity. The collected data from this assessment spans several academic years and reveals a varied but generally positive trend in student performance. From the 2017-2018 academic year, students demonstrated exceptional understanding with an impressive average score of 98. This high standard continued with an average of 94 during the 2018-2019 (Class of 2020) academic years. However, there was a noticeable dip in the average score for the Class of 2021, which fell to 85. Fortunately, the Class of 2022 showed a resurgence, raising the average back up to 93, suggesting an overall recovery in student understanding and engagement with the material. The assessment results further illustrate student achievement, with 22 students attaining perfect scores of 100. On the other hand, the data also reflects some challenges, as two students scored 85, one student achieved a score of 75, and notably, one student received a score of 0. This range of scores indicates that while the program continues to foster strong ethical reasoning and cultural competence among students, there may still be areas for improvement, particularly in addressing the consistent challenges encountered by some individuals. Overall, this data highlights the program's ongoing commitment to enhancing understanding of ethical and medical issues in patient care during the student's first semester in clinical training. No changes were recommended for this assessment tool.
		RAD 103 – Unit 4 Homework Essay Questions on Ethical and Medical Issues in Patient Care	Average score > 32 points (40 points)	First Year, 1st semester (Spring/Summer)	Clinical Coordinator	2017 - 2018: Average score 39 2018 - 2019: Average score 39 Class of 2020: Average score 39 Class of 2021: Average score 40 **Class of 2022: Average score 40**	The assessment of student learning outcomes (SLO) 4.1, which focuses on student's ability to recognize ethical and medical issues in patient care, has been evaluated through the RAD 103 Unit 4 Homework Essay Questions. The data collected over several academic years presents a clear picture of student performance in this critical area. From 2017 to 2019, students exhibited consistent performance, achieving an average score of 39. This level of understanding remained steady, indicating a potential plateau in mastery of the subject matter. However, in the following years, there was a slight improvement; both the Classes of 2021 and 2022 saw average scores increase to 40. While these scores reflect a generally stable understanding of ethical and medical issues, the incremental improvement suggests that ongoing instructional efforts may be having a positive impact. The data highlights the importance of continued focus on these essential topics in patient care, as improving students' knowledge and recognition of ethical challenges remains a key educational goal. Overall, while the average scores indicate a solid foundation, there is potential for further growth and deeper comprehension in future assessments. *Faculty have decided to implement a new assessment method for SLO 4.1, transitioning to the ARRT Code of Ethics assignment in the RAD 222 course for the Class of 2023. This change reflects a commitment to enhancing student comprehension of the professional standards of care and ethical considerations in medical practice. Given the observed plateau in average scores, the introduction of a more targeted and relevant assignment aims to deepen students' understanding of ethical dilemmas they may face in patient care. By setting a benchmark score of 35 out of 40, faculty hope to motivate students to engage critically with the material, fostering stronger ethical reasoning and application in real-world scenarios. This proactive approach not only addresses previous performance trends but also aligns educational practices with the evolving demands of the healthcare profession.*
4.2	Students will exhibit professional behaviors in the clinical setting.	RAD 150 Final Performance Evaluation – (Interpersonal Relationships: The ability to communicate and interact in a professional manner with clinical staff and peers.) **"Student communicates well with staff members, peers, and physicians in an effort to promote a productive and respectful environment"**	*Average score ≥ 3 (1 – 4-point scale) +Average score ≥ 4 (1 – 5-point scale)	First Year, 4th semester (Spring/Summer)	Clinical Coordinator	*2017 - 2018: Average score 3.8 20 students (83%) received a score of 4 4 students (17%) received a score of 3 *2018 - 2019: Average score 3.9 22 students (88%) received a score of 4 3 students (12%) received a score of 3 *Class of 2020: Average score 3.9 Average score 3.8 22 students (88%) received a score of 4 3 students (12%) received a score of 3 *Class of 2021: Average score 3.9 20 students (91%) received a score of 4 2 students (9%) received a score of 3 **+Class of 2022: Average score 4.86** 17 students (85%) received a score of 5 3 students (15%) received a score of 4	The assessment of student learning outcomes (SLO) 4.2, which focuses on exhibiting professional behaviors in the clinical setting, has been evaluated through the RAD 150 Final Performance Evaluation, specifically assessing interpersonal relationships. This evaluation measures students' ability to communicate effectively with staff members, peers, and physicians, thereby fostering a productive and respectful work environment. The data collected over several academic years reveals a trend of strong performance among students. In the 2017-2018 academic year, the average score was 3.8, with 20 students, or 83%, achieving a perfect score of 4, while 4 students scored 3. The following year, 2018-2019 (Class of 2020), saw a slight improvement, with the average rising to 3.9. In this cohort, 22 students (88%) received a score of 4, demonstrating their effective communication skills, while 3 scored 3. The Class of 2021 maintained this positive trend, achieving an average score of 3.9, with 88% and 91% of students respectively reaching the highest score of 4 The Class of 2022 exhibited exceptional results, achieving an average score of 4.86. Under the new scoring system, 17 students (85%) received a perfect score of 5, while 3 students (15%) scored 4. This remarkable performance not only reflects the students' outstanding communication skills but also indicates an upward trajectory in professional behavior expectations within the clinical setting. No changes have been recommended for this assessment tool.

		Radiography Student Professional Skills Evaluation: 2nd statement **"The student communicates with fellow students, staff, managers, and physicians in a manner you would expect /require of an entry-level radiographer."**	Average score ≥ 3 (1 – 4-point scale)	Annually in June	Clinical Coordinator	2017 - 2018: Average score 3.9 21 students (95%) received a score of 4 1 student (5%) received a score of 3 2018 - 2019: Average score 3.7 17 students (74%) received a score of 4 6 students (26%) received a score of 3 Class of 2020: No Data available due to Covid Class of 2021: Average score 3.88 13 students (74%) received a score of 4 2 students (26%) received a score of 3 **Class of 2022: Average score 3.95** 19 students (95%) received a score of 4 1 student (5%) received a score of 3.67	The assessment of student learning outcomes (SLO) 4.2, which focuses on the exhibition of professional behaviors in the clinical setting, has been evaluated through the Radiography Student Professional Skills Evaluation. This assessment specifically examines how well students communicate in a professional manner with fellow students, staff, managers, and physicians in a manner deemed essential for entry-level radiographers. Over the years, the data reveals insights into student performance in this crucial area. In the 2017-2018 academic year, students achieved an average score of 3.9, with an impressive 95% of students—21 individuals—receiving a score of 4, while 1 student scored 3. The following year, 2018-2019, there was a slight decline in average performance to 3.7, where 17 students (74%) received a score of 4, and 6 students (26%) scored 3. Due to COVID-19 restrictions, no data was available for the Class of 2020, but the Class of 2021 showed resilience with an average score of 3.88. In this cohort, 13 students (74%) achieved a score of 4, while 2 students (26%) obtained a score of 3, reflecting a stable performance despite the challenges. In a significant improvement, the Class of 2022 achieved an outstanding average score of 3.95. Within this group, 19 students (95%) earned a perfect score of 4, while 1 student (5%) received a score of 3.67. This data indicates not only a marked enhancement in communication skills but also a clear commitment to professionalism among the most recent cohort. *A new assessment method will be implemented for the class of 2023. The 12th statement from the Radiography Student Professional Skills Evaluation will be implemented "The student uses professional judgment and shows respect for organizational policies and norms." The benchmark will remain the same - average score ≥ 3 (1 – 4-point scale). The change reflects a shift in focus from professional communication skills to a broader understanding of professional conduct. Faculty recognized that radiography students need to demonstrate not only effective interpersonal communication but also professional judgment and adherence to organizational policies. This evolution in the assessment tool underscores the importance of critical thinking and ethical decision-making in preparing students for the realities of the healthcare environment, ensuring they are well-equipped to navigate complex professional situations in the radiology department.*

	Program Effectiveness Measures:						
	Student Outcomes	**Assessment Tool**	**Benchmark**	**Timeline**	**Faculty Responsible**	**Results 5-year Average per class**	**Analysis**
1	The 5-year average pass rate for the ARRT credentialing examination is not less than 75% on the first attempt.	ARRT Annual Program Summary Report for WCC graduates	The five-year average pass rate of not less than 75% on the 1st attempt of the National Radiography Certificate Examination administered by the American Registry of Radiologic Technologist (ARRT).	Annually in July	Program Director	2018: 100% 2019: 100% 2020: 100% 2021: 95% **2022: 100%** 5 Year Average 99%	The effectiveness of the WCC Radiography Program is further evidenced by the impressive five-year average pass rate for the ARRT credentialing examination. The program has set a benchmark of achieving a pass rate of no less than 75% on the first attempt, and the assessment data proudly reflects the program's success in this regard. Over the past five years, graduates have consistently excelled in the ARRT examination. In 2018, 100% of WCC graduates passed on their first attempt, a feat that was mirrored in 2019 and 2020. While there was a slight dip in 2021, with a pass rate of 95%, the program bounced back to achieve another 100% pass rate in 2022. The cumulative data from these years results in an exceptional five-year average pass rate of 99%. This statistic not only surpasses the program's benchmark but also illustrates the effectiveness of the training and education provided to students. Overall, these results reinforce the program's commitment to preparing its graduates for successful careers in radiography and highlight its excellence in fostering high levels of competency upon entering the profession.
2	5-year average job placement rate of graduates actively seeking employment is no less than 75% within 12 months of graduation.	Email & Social Media	Five-year average job placement rate of not less than 75% within 12 months of graduation.	Annually in July	Program Director	2018: 100% 2019: 91% 2020: 95% 2021: 95% **2022: 100%** 5 Year Average 96%	The program effectiveness measure concerning the job placement rate of graduates actively seeking employment has shown impressive results over the past five years. The WCC Radiography Program aims for a job placement rate of not less than 75% within 12 months of graduation, and the assessment data demonstrates success in this area. In 2018, the program achieved an outstanding job placement rate of 100%, with all graduates successfully securing employment within the specified timeframe. This high standard continued into 2019 when 91% of graduates found jobs. The following year, 2020, saw a notable rebound with a 95% placement rate, and this consistency was maintained in 2021, with another 95% of graduates employed within the year. The Class of 2022 marked a return to excellence, achieving another 100% job placement rate. This impressive performance across all five years results in a remarkable five-year average job placement rate of 96%. Overall, these results not only reflect the effectiveness of the WCC Radiography Program in preparing its graduates for successful careers in their field but also indicate high demand for radiography professionals in the job market. The program's strong emphasis on creating employable graduates is yielding positive outcomes, ensuring that students are well-prepared and sought after by employers upon graduation.

3	Students admitted to the program will successfully complete the program within the 2-year sequence.	Admission/ Graduation data	*70% of the students admitted and enrolled in the program will complete the program within two years. The measure will be based on program retention rates (i.e., the number of students admitted to the program and the number of students who complete the program within two years.) #70% of the students admitted and enrolled in the program will complete the program within two years. The benchmark will be based on program retention rates defined by the Joint Review Committee on Education in Radiologic Technology (JRCERT). When calculating the completion rate, the program will not consider students who attrite due to nonacademic reasons. This can include financial, medical/mental health, or family reasons, military deployment, a change in major/course of study, and/or other reasons classified as a nonacademic withdrawal.	Annually in July	Program Director	*2018: 71% *2019: 74% *2020: 69% #2021: 92% **#2022: 80%**	The data shows that the percentage of students admitted to the program who completed it within a two-year sequence has remained relatively steady for classes 2018, 2019, and 2020. In 2018, 71% of students completed the program, which increased to 74% in 2019 before dropping slightly to 69% in 2020. For the classes of 2021 and 2022, the completion rates were based on the JRCERT's definition. Specifically, the retention rate for the 2021 class increased to 91%. Unfortunately, the retention rate for the 2022 class dropped to 80%. In that class, there were 9 voluntary withdrawals and 5 dismissals compared to the 2021 class, which had 8 voluntary withdrawals and 2 dismissals. Faculty have discussed a variety of reasons for the higher dismissals rate for 2022. Four out of the 5 dismissals occurred in clinical courses. One student was dismissed for providing diagnostic information to a patient. The other 3 students failed clinicals during the first initial semesters in the program. Faculty agreed that students are instructed from the time they enter the program that diagnosing for a patient is unethical and will result in immediate dismissal. The student who violated this rule received the same instructions as her peers, so there was no excuse. The commonality among the three students that failed clinical was due to an inadequate display of competency while performing radiographic procedures. During clinical orientation, Ms. Hammond will continue to emphasize the importance of ethical behavior and clinical competency. Ms. Hammond has routinely provided students the opportunity to come to the lab and work on positioning before simulation testing.
4	Graduates will indicate that the program adequately prepared them for entry-level positions.	Graduate Exit Survey (Question 11) **"Do you feel that the WCC Radiography Program prepared you for an entry-level position in a radiology department?"**	Average score > 3 (5-point scale; 5 = strongly agree, 1=strongly disagree)	Annually in July	Program Director	2018: Average score 4.5 21 (95%) of 22 graduates responded: 15 graduates (73%) Strongly agreed 4 graduates (18%) Agree 2 graduates (9%) Strongly disagree 2019: Average score 4.8 21 (91%) of 23 graduates responded 17 graduates (80.9%) Strongly agree 4 graduates (19%) Agree 2020: Average score 4.6 22 (100%) of 22 graduates responded 14 graduates (64%) Strongly agree 8 graduates (36%) Agree 2021: Average score 4.9 21 (95%) of 22 graduates responded 20 graduates (95%) Strongly agree 1 graduates (5%) Agree **2022: Average score 4.9** 20 (100%) of 20 graduates responded 17 graduates (85%) Strongly agree 3 graduates (15%) Agree	The assessment of program effectiveness, specifically focusing on how well the WCC Radiography Program prepares its graduates for entry-level positions, has been measured through Graduate Exit Survey Question 11. This question prompts graduates to evaluate their preparedness for working in a radiology department. The data gathered over several years reflects a consistently high level of satisfaction among graduates. In 2018, the average score was 4.5, with 21 out of 22 graduates responding. Of those, 15 graduates (73%) strongly agreed that the program had adequately prepared them, while 4 (18%) agreed, and 2 graduates (9%) strongly disagreed. The following year, 2019, saw an increase in the average score to 4.8, with 21 out of 23 graduates responding. A substantial number of 17 graduates (80.9%) strongly agreed with their preparation, while 4 (19%) agreed, demonstrating an upward trend in perceptions of readiness. In 2020, the average score slightly dipped to 4.6, though it still indicated strong support, as all 22 graduates responded. Here, 14 graduates (64%) strongly agreed, and 8 (36%) agreed, suggesting that while most felt prepared, there were still some varied perceptions regarding their readiness. The Class of 2021 marked a peak in satisfaction, with an average score of 4.9. In this cohort, 21 out of 22 graduates responded, and an impressive 20 graduates (95%) strongly agreed they were well-prepared, with only 1 graduate (5%) agreeing. This high level of satisfaction continued in 2022, where the average score remained at 4.9, with 20 out of 20 graduates responding. In this class, 17 graduates (85%) strongly agreed that the program prepared them for entry-level positions, while 3 graduates (15%) agreed. Overall, the data illustrates a strong consensus among graduates regarding the effectiveness of the WCC Radiography Program in preparing them for their professional roles. With high average scores consistently reported each year, the program demonstrates robust performance in equipping students for success in the radiology field.
5	Employers will indicate that the program graduates are adequately prepared for entry-level positions.	Radiography Student Professional Skills Evaluation **"If an entry-level radiographer position was available within the department, I would consider hiring this student."**	*Average score ≥ 4 (5 point scale) +Average score > 3 (4-point scale)	Annually in June	Clinical Coordinator	*2018 Average score 5 (5- point scale used this year) 22 students (100%) received a 5 +2019 Average score 3.78 18 students (78%) received a score of4 5 students (22%) received a score of3 +2020 Average score 3.82 18 students (86%) received a score of4 4 students (14%) received a score of3 +2021 Average score 3.94 114 students (93%) received a score of4 1 students (7%) received a score of3 **+2022 Average score 3.82** 16 students (80%) received a score of 4 4 students (20%) received a score of 3	The evaluation of program effectiveness, specifically regarding the preparedness of graduates for entry-level radiographer positions, has been conducted using the Radiography Student Professional Skills Evaluation. One key measure in this assessment is the statement: "If an entry-level radiographer position was available within the department, I would consider hiring this student." The results from this evaluation highlight a generally positive trend in employer perceptions of student readiness. In 2018, the program achieved outstanding results, with an average score of 5 on a five-point scale, indicating that all 22 students surveyed (100%) were deemed suitable for hire. This exceptional performance set a high standard for subsequent years. In 2019, however, there was a noticeable drop in average scores to 3.78. In this cohort, 18 students (78%) received a score of 4, while 5 students (22%) scored 3. The following year, 2020, saw a slight improvement with an average score of 3.82; 18 students (86%) received a score of 4, and 4 students (14%) attained a score of 3, suggesting that employers were increasingly confident in student competencies. Continuing this upward trajectory, the Class of 2021 achieved an average score of 3.94, with 14 students (93%) receiving a score of 4 and only 1 student (7%) scoring 3. This indicates significant employer trust in the preparedness of these graduates for entry-level positions. In 2022, the program maintained a solid average of 3.82, with 16 students (80%) receiving a score of 4 and 4 students (20%) scoring 3. This consistency reinforces the program's effectiveness in preparing graduates for success in their professional roles. Overall, these assessment results illustrate a generally positive response from employers regarding the readiness of program graduates for entry-level positions, with fluctuations suggesting areas for continued improvement while solidifying the program's reputation for producing competent and professional radiographers.

Appendix B: Program Effectiveness Data

Institution Name: Washtenaw Community College
Program Type: Radiography
Degree Type: Associates

Program Effectiveness Data

The following is the most current program effectiveness data. Our programmatic accreditation agency, the Joint Review Committee on Education in Radiologic Technology (JRCERT), defines and publishes this information. Click here to go directly to the JRCERT webpage.

Credentialing Examination: The number of students who pass, on the first attempt, the American Registry of Radiologic Technologists (ARRT) certification examination, or an unrestricted state licensing examination, compared with the number of graduates who take the examination within six months of graduation. The five-year average benchmark established by the JRCERT is 75%.

Credentialing Examination Rate	number passed on 1st attempt divided by number attempted within 6 months of graduation
Year	**Results**
Year 1 - 2018	22 of 22 - 100%
Year 2 - 2019	23 of 23 - 100%
Year 3 - 2020	22 of 22 - 100%
Year 4 - 2021	22 of 21 - 95%
Year 5 - 2022	20 of 20 - 100%
Program 5-Year Average	109 of 108 - 99%

Job Placement: The number of graduates employed in the radiologic sciences compared to the number of graduates actively seeking employment in the radiologic sciences within twelve months of graduating. The five-year average benchmark established by the JRCERT is 75%.

Job Placement Rate	number employed divided by number actively seeking employment within 12 months of graduation
Year	**Results**
Year 1 - 2018	21 of 21 - 100%
Year 2 - 2019	23 of 21 - 91%
Year 3 - 2020	22 of 21 - 95%
Year 4 - 2021	22 of 21 - 95%
Year 5 - 2022	20 of 20 - 100%
Program 5-Year Average	108 of 104 - 96%

Program Completion: The number of students who complete the program within the stated program length. The annual benchmark established by the program is 70 .

Program Completion Rate	number graduated divided by number started the program
Year	**Results**
Year - 2022	25 of 20
Annual Completion Rate	80%

Appendix C: Radiation Safety Agreement

Washtenaw Community College | RADIOGRAPHY

Radiation Safety Policies

Student Signature Page

I, _____ have received and read the "Radiation Safety" section of this handbook. I agree to abide by the radiation safety rules and regulations throughout the program. I also understand that I must exchange my dosimeters promptly when requested and turn in my last set of dosimeters at the end of the program.

Signature: _____

Date: _____

Appendix D: Clinical Supervision Program Policies

Students,
This is a reminder of the WCC Radiography Program's policies concerning your supervision while taking images at your clinical site to ensure that you are not putting yourself nor your patients in harm's way. It is taken from your Clinical Handbook that you received during your orientation and to which you signed an agreement to abide by.

Direct Supervision
While in the radiology department of your clinical site, a student taking medical images should be supervised at all times. According to the regulations of the Joint Review Committee on Education of Radiologic Technologists (JRCERT), no more than one student shall be assigned to a qualified radiographer (ARRT). Direct supervision is defined as the radiographer is in the presence of and watching the student during all parts of the procedure that the student is performing. All medical imaging procedures will be performed under the direct supervision of a qualified radiographer until the student achieves competency. To ensure proper supervision, students will be assigned to a qualified radiographer in the appropriate scheduled area.

Indirect Supervision
After a student has successfully demonstrated competency in a specific medical imaging procedure, the radiography student can receive indirect supervision from a qualified radiographer. Indirect supervision is defined as supervision provided by a qualified radiographer immediately available to assist a student regardless of competency level. The radiographer should be adjacent to the room or location where a radiographic procedure is being performed. Immediately available does not mean by phone from another floor of the hospital.

Repeated Radiography Examinations
If it is necessary for a student to repeat ANY unsatisfactory radiographs, the student will perform ALL repeated radiographers under the direct supervision of a qualified staff radiographer.

Because this issue is of concern for the safety of our patients and the safe practice of our profession, violating it constitutes a Group I infraction and suspension from the Radiography Program. Therefore, advocate for yourself and make sure that you are being properly supervised. If you are not, please go to your Clinical Preceptor.

I have read and understand the above statement:

Student Signature: _____

Date: _____

Appendix E: Magnetic Resonance Imaging (MRI) Radiography Student Screening Form

Washtenaw Community College
Radiography Program
Magnetic Resonance Imaging (MRI) Radiography Student Screening Form

Certain implants, devices, or objects may pose a hazard to individuals in close proximity to the magnet of a MRI scanner. To ensure your safety in the MRI environment, it is necessary that you answer the following questions.

Have you had an injury to the eye involving a metallic object or fragment (e.g., metallic slivers, shavings, foreign body, etc.)? ___ Yes ___No

Have you ever been injured by a metallic object or foreign body (e.g., BB, bullet, shrapnel, etc.)? ___Yes ___No

Do you have a cochlear, otologic, or other ear implant (including hearing aid)? ___Yes ___No

Please indicate if you currently have or ever had any of the following:

Pacemaker, wires or defibrillator	__Yes	__No	Eyelid or body tattoo	__Yes	__No
Aneurysm clip(s)	__Yes	__No	Eye spring or wire	__Yes	__No
Implanted cardioverter defibrillator	__Yes	__No	Body piercing jewelry	__Yes	__No
Electrical stimulator for nerves or bone	__Yes	__No	Implanted catheter, tube or shunt	__Yes	__No
Magnetically activated implant/device	__Yes	__No	False teeth, retainers, or braces	__Yes	__No
Neurotransmitter	__Yes	__No	Intrauterine device or diaphragm	__Yes	__No
Spinal cord stimulator	__Yes	__No	Surgical clips, staples, wires	__Yes	__No
Bone growth/bone fusion stimulator	__Yes	__No	Radiation seeds or implants	__Yes	__No
Insulin or other infusion pump	__Yes	__No	Medical patch (transdermal)	__Yes	__No
Coil, filter, wire, or stent in blood vessel	__Yes	__No	Wire mesh implant	__Yes	__No
Any type of prosthesis (e.g., eye, penile)	__Yes	__No	Tissue expander (e.g., breast)	__Yes	__No
Artificial or prosthetic limb	__Yes	__No	Shunt (spinal or intraventricular)	__Yes	__No
Heart valve prosthesis	__Yes	__No	Wig or hair implants	__Yes	__No
Orthopedic hardware (plates, screws, pins, rode, wires, etc.)	__Yes	__No			

If you have answered yes to any of the above questions, please explain:

_____

_____

_____

I have read and understand the WCC Radiography MRI Safety Policy and had the opportunity to ask questions. It is the responsibility of the student to notify faculty of any changes and update this form.

Student Name (Print):_____

Student Signature:_____ Date:_____

Appendix F: Radiography Handbook Agreement

Washtenaw Community College | RADIOGRAPHY

Handbook Agreement

The handbook agreement page is to be signed by all students before entering into clinical training. This agreement states that while the student is in clinical practice, he/she/they will abide by the rules and policies of the sponsoring affiliate and the Radiography Program.

I _____ have been instructed on the contents of the Radiography Handbook for the Student Radiographer which includes policies governing clinical academic achievement, attendance, personal appearance, rules, and code of conduct. I understand and accept these policies as stated in the Radiography Handbook for the Student Radiographer and will abide by all rules and regulations of Washtenaw Community College, the radiography program, and affiliating clinical education centers. I understand that if I violate these policies and regulations, I will be disciplined according to the stated disciplinary actions

I also understand the importance of confidentiality in the medical profession and will not disclose any information regarding a patient, fellow student, or hospital personnel without proper authorization.

_____ _____

STUDENT SIGNATURE DATE

Appendix G: Clinical Infection Control Compliance Statement

Washtenaw Community College | RADIOGRAPHY

Clinical Infection Control Compliance Statement

I, _____: (print full name)

• understand participation in Clinical Education carries an inherent risk of exposure to infectious diseases, which may include, but are not limited to, seasonal flu, Covid-19, Tuberculosis (TB), Methicillin-resistant Staphylococcus aureus (MRSA), and clostridium difficile (C-diff).

• understand clinical education is an essential component of my professional education that cannot be replaced with laboratory experiences, virtual simulations, or other remote experiences.

• will have completed instruction in infection control practices and the use of PPE before clinical placement.

• agree to follow safe infection control practices in the clinical setting and to adhere to any additional Safety Guidelines, Policies, and Procedures instituted by my clinical site and my professional program. I understand that failure to follow these guidelines may result in dismissal from the clinical site.

• understand following these procedures and guidelines does not eliminate the risk of contracting these diseases, only reduces the probability of transmission to myself and others.

• agree to be placed in clinical settings.

_____ _____

Student Signature Date

Appendix H: Radiographic Procedure Evaluation Form

Washtenaw Community College
Radiography Program

Clinical Education

Radiographic Procedure Evaluation –General Radiography

Student:_____ Date:_____

Clinical Affiliate:_____ Evaluator:_____

Procedure:_____ Accession #: _____

To the evaluator: Radiographic procedure evaluations test the student's abilities and competency level when performing a specific radiographic evaluation. When being evaluated the student is required to perform the procedure independently and professionally. Please monitor the student carefully. Check the appropriate response according to the student's performance. Starred (*) tasks are critical to the successful completion of this evaluation. If a starred task is not performed, the evaluation process is terminated. **Leave blank the statements which do not apply.**

Interpretation of Requisition	Yes	No
1. Identify the appropriate procedure to be performed.	[ ]	[ ]
2. Identify patient information (name, age, and mode of transportation).	[ ]	[ ]
3. Examination room clean and prepared for requested procedure.	[ ]	[ ]
Patient Communication and Safety		
*4. Identify correct patient according to requisition and departmental policy.	[ ]	[ ]
*5. Introduce self to patient and give a brief explanation of the exam.	[ ]	[ ]
6. Maintain patient dignity and modesty through proper gowning and covering of patient.	[ ]	[ ]
*7. Assist patient to the upright bucky and/or radiographic table, if required.	[ ]	[ ]
8. Request maternal status according to departmental policy.	[ ]	[ ]

Comments: _____

_____

Performance Evaluation – In the spaces provided, rate each projection according to the student's performance. Statements that do not apply leave blank.

1 –Yes, the student performed this task 0 – No, the student deleted or could not perform this task

Projections:	**AP-PA**	**Lat**	**Obl**	**Decub**	**Other**
9. Select proper imaging media (film/cassette or IP).	[ ]	[ ]	[ ]	[ ]	[ ]
10. Center IP/cassette in the bucky tray or under anatomy.	[ ]	[ ]	[ ]	[ ]	[ ]
*11. Align bucky tray and x-ray tube; tube placed in detent.	[ ]	[ ]	[ ]	[ ]	[ ]
*12. Place patient in the correct position for required projection.	[ ]	[ ]	[ ]	[ ]	[ ]
*13. Align CR to the appropriate centering point per projection.	[ ]	[ ]	[ ]	[ ]	[ ]
14. Provide clear positioning instructions in a calm and professional manner.	[ ]	[ ]	[ ]	[ ]	[ ]
*15. Select appropriate AEC or manual technique setting for procedure. (Please record technique (kVp/mAs) selected or AEC readout)	/	/	/	/	/
*16. Set the correct tube angulation, if required.	[ ]	[ ]	[ ]	[ ]	[ ]
17. Collimate to anatomy according to requested procedure.	[ ]	[ ]	[ ]	[ ]	[ ]
*18. Provide gonadal shielding, applicable.	[ ]	[ ]	[ ]	[ ]	[ ]
19. Give proper breathing instructions.	[ ]	[ ]	[ ]	[ ]	[ ]

Comments: _____

_____

Image Evaluation and Patient Dose – After the procedure has been completed, review the films with the student. Rate each projection according to departmental image quality standards and patient exposure index values. Ask the student to explain why it is/is not an acceptable image and have them point out and name anatomical structures which must be included.

1 – Yes, acceptable image quality/student response 0 – No, unacceptable image quality/student response

Projections:	AP-PA	Lat	Obl	Decub	Other
*20. Anatomy shown in proper position and rotation.	[ ]	[ ]	[ ]	[ ]	[ ]
*21. Anatomy and image receptor centered according to the procedure.	[ ]	[ ]	[ ]	[ ]	[ ]
*22. Proper density/contrast or window/level represented on the images(s).	[ ]	[ ]	[ ]	[ ]	[ ]
*23. Patient exposure index values are within department range. (Please record index value/range for each projection if possible)	_____	_____	_____	_____	_____
*24. Adequate detail visualized; no visible motion, grid lines or artifacts.	[ ]	[ ]	[ ]	[ ]	[ ]
*25. R and L markers properly displayed; do not obstruct pertinent anatomy.	[ ]	[ ]	[ ]	[ ]	[ ]
26. Accessory markers visible, if applicable.	[ ]	[ ]	[ ]	[ ]	[ ]
*27. Patient information visible on radiographs.	[ ]	[ ]	[ ]	[ ]	[ ]
28. Student able to explain using proper terminology why/why not the image is acceptable.	[ ]	[ ]	[ ]	[ ]	[ ]
29. Student able to name and point out anatomical structures which must be included.	[ ]	[ ]	[ ]	[ ]	[ ]

Comments: _____

_____

_____

Evaluation process completed [ ] **Evaluation process terminated due to deleted task(s)** [ ]

Evaluation process completed during off-shift [ ]

Total Percentage _____

Evaluator Signature: _____ Date: _____

Student Signature: _____ Date: _____

Clinical Instructor: _____ Date: _____

Appendix I: Clinical Performance Evaluation

Subject: Please select...

Site: Please select...

Clinical Evaluation RAD 150

Any item scored 1 or 2 will require a comment to be added. To add a comment, click on the comment bubble to the right of the line item.

Grading Scale:

(1) **Unsatisfactory:** Does not meet expectations for level of education, significant improvement needed
(2) **Needs Improvement:** Noticeably less than expected performance level for the level of education
(3) **Satisfactory**
(4) **Above Average:** Often performs at a level beyond the requirements
(5) **Exceeds Expectations:** Consistently exceeds expectations for level of education

Patient Communication

The student demonstrates the ability to communicate with the patient in a professional manner	◯1 ◯2 ◯3 ◯4 ◯5
The student demonstrates concern for patients' well-being including comfort and modesty	◯1 ◯2 ◯3 ◯4 ◯5
Explains procedure in language the patient can understand to achieve proper positioning	◯1 ◯2 ◯3 ◯4 ◯5
Demonstrates cultural competency and sensitivity in all interactions	◯1 ◯2 ◯3 ◯4 ◯5
Follows department procedures regarding patient confidentiality (HIPAA)	◯1 ◯2 ◯3 ◯4 ◯5

Patient Safety and Welfare

Demonstrates an understanding of promoting patient care; assists technologist as much as possible during procedures	◯1 ◯2 ◯3 ◯4 ◯5
Demonstrates proper technique for transporting patients to exam table	◯1 ◯2 ◯3 ◯4 ◯5
Awareness of physical condition of patients and limitations that may be present	◯1 ◯2 ◯3 ◯4 ◯5
Acts in a manner that supports the importance of patient safety	◯1 ◯2 ◯3 ◯4 ◯5

Radiation Safety

The student understands the importance of radiation protection and uses all methods available to protect the patient, self and others from unnecessary radiation exposure	◯1 ◯2 ◯3 ◯4 ◯5
Consistently asks and documents pregnancy status when applicable	◯1 ◯2 ◯3 ◯4 ◯5
Demonstrates appropriate collimation	◯1 ◯2 ◯3 ◯4 ◯5
Takes repeat images only under direct supervision	◯1 ◯2 ◯3 ◯4 ◯5

Technical Aptitude

Has a good understanding of the image acquisition process using various equipment in the facility and needs minimal assistance	◯1 ◯2 ◯3 ◯4 ◯5
Demonstrates knowledge of exam requisitions and department protocols	

○1 ○2 ○3 ○4 ○5

Demonstrates proper manipulation of radiographic / fluoroscopic / portable equipment including tube, SID, table movement / locks / tube / bucky alignment	○1 ○2 ○3 ○4 ○5

Accountability

The student arrives on time consistently. Returns from lunch / break in a timely manner	○1 ○2 ○3 ○4 ○5
Student uses the designated time in / time out system appropriately	○1 ○2 ○3 ○4 ○5
Student is always readily available (is not often missing in action)	○1 ○2 ○3 ○4 ○5
Student places a high priority on his / her clinical time and is not absent frequently	○1 ○2 ○3 ○4 ○5
The student shows initiative and is eager to learn new procedures and seeks continuous improvement	○1 ○2 ○3 ○4 ○5
Takes ownership of any mistakes made and acts proactively	○1 ○2 ○3 ○4 ○5

Personal Appearance

Student comes dressed appropriately in uniform	○1 ○2 ○3 ○4 ○5
Neat and clean in appearance	○1 ○2 ○3 ○4 ○5
Maintains good personal hygiene	○1 ○2 ○3 ○4 ○5
Portrays a professional image in appearance and communication	○1 ○2 ○3 ○4 ○5
Follows any and all hospital policies regarding hair / nails / tattoos / piercings	○1 ○2 ○3 ○4 ○5

Interpersonal Relationships

Student communicates well with staff members, peers, and physicians in an effort to promote a productive and respectful environment	○1 ○2 ○3 ○4 ○5
Student demonstrates a spirit of cooperation and functions well as a team member	○1 ○2 ○3 ○4 ○5
Student follows directions well and asks appropriate questions when necessary	○1 ○2 ○3 ○4 ○5

Self-Improvement

The student uses constructive criticism as a means to improve clinical performance	○1 ○2 ○3 ○4 ○5
The student seeks out ways to improve whether by practice and repetition or advice / education from a technologist or both	○1 ○2 ○3 ○4 ○5
The student respects the technologists and their knowledge and experience and defers to them	○1 ○2 ○3 ○4 ○5

General Radiography

Using the same scale, assess the student's performance in the following areas given that the student is in his / her third semester of clinical training and has learned all t

positioning.

Work Independence- the ability to assume a lead role in the general radiography area	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	
Organization of work- the ability to plan and prepare imaging area based on procedure requirements	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	
Technical Aptitude- Demonstrates an understanding of how to use equipment	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	
Setting Exposure Technique- understands the relationship of kVp and mAs and the appropriate use given body habitus, pathology etc.	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	
X-ray tube & Bucky alignment- consistently aligns tube and bucky	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	
Quality of Positioning and Images- the degree of accuracy and thoroughness displayed when performing an exam	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	
Image processing- demonstrates knowledge of evaluation, proper orientation of images and annotation as well as the process for sending to PACS	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	

Portable Radiography (If applicable)

Work Independence- the ability to assume a lead role in the general radiography area	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	◯ N/A
Organization of work- the ability to plan and prepare imaging area based on procedure requirements	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	◯ N/A
Technical Aptitude- Demonstrates an understanding of how to use equipment	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	◯ N/A
Setting Exposure Technique- understands the relationship of kVp and mAs and the appropriate use given body habitus, pathology etc.	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	◯ N/A
X-ray tube & Bucky alignment- consistently aligns tube and bucky	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	◯ N/A
Quality of Positioning and Images- the degree of accuracy and thoroughness displayed when performing an exam	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	◯ N/A
Image processing- demonstrates knowledge of proper evaluation, orientation of images and annotation as well as the process for sending to PACS	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	◯ N/A

Fluoroscopy (If applicable)

Work Independence- the ability to assume a lead role in the fluoroscopy area	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	◯ N/A
Organization of work- the ability to plan and prepare imaging area based on procedure requirements	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	◯ N/A
Technical Aptitude- Demonstrates an understanding of how to use equipment and prepare appropriately	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	◯ N/A
Setting Exposure Technique- understands the relationship of kVp and mAs and the appropriate use given body habitus, pathology etc.	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	◯ N/A
X-ray tube & Bucky alignment- consistently aligns tube and bucky	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	◯ N/A
Fluoro-tower competency- can manipulate locks, table movement and tower with minimal disruption to patient	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	◯ N/A
Quality of Positioning and Images- the degree of accuracy and thoroughness displayed when performing an exam	◯ 1	◯ 2	◯ 3	◯ 4	◯ 5	◯ N/A

Image processing- demonstrates knowledge of proper evaluation, orientation of images and annotation as well as the process for sending to PACS	◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5 ◯ N/A
Professionalism- develops good rapport with doctor and patient quickly	◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5 ◯ N/A

Operating Room / C-arm Procedures (If applicable)

Work Independence- the ability to assume a lead role in the general radiography area	◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5 ◯ N/A
Organization of work- the ability to plan and prepare imaging area based on procedure requirements	◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5 ◯ N/A
Technical Aptitude- Demonstrates an understanding of how to use equipment	◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5 ◯ N/A
C-arm competency- can effectively manipulate locks to maneuver C-arm in to desired position while protecting the sterile field	◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5 ◯ N/A
Setting Exposure Technique- understands the relationship of kVp and mAs and the appropriate use given body habitus, pathology etc.	◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5 ◯ N/A
Quality of Positioning and Images- the degree of accuracy and thoroughness displayed when performing an exam	◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5 ◯ N/A
Image processing- demonstrates knowledge of proper evaluation, orientation of images and annotation as well as the process for sending to PACS	◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5 ◯ N/A
Professionalism- develops good rapport with doctor and patient quickly and understands the rules in the OR	◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5 ◯ N/A

Competency Maintenance

Successful completion of student competencies indicates the student possesses the necessary skills to execute these procedures / exams independently on a consiste please rate the following:

The student continues to perform radiographic procedures previously mastered on a regular basis	◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5
When the student is involved in procedures previously mastered, the student is able to perform the exam perform the exam with minimal assistance	◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5
Please elaborate upon specific areas for growth or improvement or areas in which student excels:	

Student Signature: Student may add signature by attaching a post-submission comment. ◯ Instructions

☐ Check to complete later, then click "Submit" ◯ Approved

Appendix J: Glossary of Terms

Assist (Radiographic Procedure): The student supports the radiographer during the radiographic examination by aiding in the execution of the procedure.

Category: A set of related radiographic exams representing a specific area of the human body, such as the upper extremity.

Clinical Deficiency: The inability to perform clinical tasks at the expected or required level of competency.

Competency: The ability to work with minimal supervision, handling responsibilities and duties outlined in the course and clinical objectives.

Competency Evaluation: The assessment of the student's performance and the resulting radiograph. The minimum acceptable competency level is 95%.

Direct Supervision: A qualified radiographer supervises the student by:

- Observing the student during the procedure,
- Evaluating the patient's condition in relation to the student's knowledge,
- Reviewing and approving the procedure based on the student's competency,
- Being present during any repeat or unsatisfactory radiographs.

Indirect Supervision: Supervision is provided by a qualified radiographer who is immediately available to assist the student, regardless of their competency level. The radiographer must be nearby in the same location where the radiographic procedure is being carried out.

Observe (Radiographic Procedure): The student watches all stages of the radiographic examination to develop the skills necessary for performing the procedure independently in the future.

Qualified Radiographer: A person certified by the American Registry of Radiologic Technologists (ARRT) who is in good standing with the certification agency and the sponsoring institution.

Radiographic Examination: A series of radiographic images of an anatomical area, conducted to provide sufficient diagnostic information.

Simulation: The student practices a radiographic procedure on a live subject (not a patient) and simulates the exposure. A radiograph from this session is used in the Image Performance section for evaluation. The student is responsible for critiquing the image.

Solo (Radiographic Procedure): The student independently performs every aspect of the procedure with the same professionalism as a staff radiographer, receiving no assistance from the supervising radiographer unless absolutely necessary.

Appendix K: Group I Violation

Washtenaw Community College | RADIOGRAPHY

Group I Violation

Student Name:_____ Clinical Site: _____

Students who violate policies or display behaviors found in the Group I category will receive a failing grade for a clinical education course, be expelled from clinical education, and expelled from the radiography program. Dismissal for these offenses is permanent. Be advised that dismissal from a program may cause you to be ineligible to take the ARRT registry exam at any time in the future. **It is the student's responsibility and not the WCC Radiography Program to contact** ARRT for an Ethics Pre-Application Review of the student's status to be allowed to take the registry exam.

[ ] Obtaining, possessing, or using controlled substances or alcohol on hospital premises. Reporting to the clinical station under the influence of any of these substances.

[ ] Theft, abuse, misuse, or destruction of the property or equipment of any patient, visitor, student, hospital personnel, or the hospital.

[ ] Disclosing confidential information about any patient, student, or hospital personnel, or clinical site without proper authorization, or any violation of HIPAA.

[ ] Immoral, indecent, illegal, or unethical conduct on hospital premises.

[ ] Possession of a weapon on hospital premises.

[ ] Intimidation/threat (physical or verbal) or assault of any patient, visitor, student, instructor, or hospital personnel.

[ ] Disruption, destruction, or removal of patient, student, or official hospital records without authorization.

[ ] Falsifying any student or official hospital records.

[ ] Failure to complete the required hospital orientation process including the submission of all required documentation prior to the first day of clinical.

[ ] Failure to contact the clinical instructor at least one week prior to the first day of clinical.

[ ] Unexcused absence of three consecutive clinical days or three no-call, no-shows in a semester.

[ ] Request for removal by the clinical site for continued failure to perform at expected competency l level, willful incompetence, serious infractions of site-specific rules, insubordinate behavior, or determination by the site's clinical instructor(s) or administration that continued training of the the student would constitute a safety risk to patients or a disruption to normal department operations.

[ ] Unsafe practice of the profession.

[ ] Violation of the Radiography program's Radiation Safety Guidelines.

[ ] Violation of the principles stated in the ARRT Standard of Ethics found in the appendix of the Program Handbook.

Appendix L: Group II Violation Form

Washtenaw Community College | RADIOGRAPHY

Group II Violation

Student Name:_____ Clinical Site:_____

Violation of policies or display of behaviors found in the Group II category will result in one or more of the following disciplinary actions:

1. A written or oral warning is given documenting the offense and counseling of the student.
2. Suspension - Dismissal from the clinical site for a specific number of days. This will be determined by the Clinical Coordinator and/or Clinical Instructor or Department Chair.
3. A written reprimand and one letter grade reduction.
4. Failing grade for the course.

Please mark the offense(s) committed by the student:

[ ] Excessive tardiness.
[ ] Excessive absence.
[ ] Leaving assigned area without permission.
[ ] Soliciting, vending, or distribution of literature, written or printed matter without proper authorization.
[ ] Using abusive, obscene, or inappropriate language around any patient, visitor, student, or hospital employee.
[ ] Inappropriate dress or appearance based upon WCC policy, including poor hygiene.
[ ] Leaving hospital premises during assigned clinical hours without proper authorization.
[ ] Smoking on campus or on the premises of any clinical education site.
[ ] Showing a lack of respect for faculty, WCC, or the clinical instructors and staff.
[ ] Disrupting /inappropriate questions in the clinical setting.
[ ] Improper use of attendance or clinical hour make-up system according to clinical affiliate or program.
[ ] Violation of the policies or procedures of the student's assigned clinical site.
[ ] Exceeding the Radiography Radiation Dose Limits at the Action 2 Level dose.

Signatures Required:

Student:_____ Date:_____

Clinical Coordinator:_____ Date:_____

Appendix M: Technical Standards

Technical Standards for Health Science Programs at Washtenaw Community College (WCC) Radiography (APRAD)

The technical standards aim to inform students choosing to enter a Health Sciences Certificate and Degree Program at WCC with the bare minimal technical standard requirements, which must be met to complete all coursework objectives and student outcomes. The listed standards encompass what is minimally required to perform the tasks necessary, with a few associated examples provided. This list is not exhaustive and can be modified as the College deems necessary. Students enrolled in a Health Science program at WCC must provide safe and effective care. These technical standards apply to any student enrolling in any one of the health sciences programs. To meet program technical standards, the student must demonstrate sufficient cognitive, emotional, professional, motor (physical), sensory, and other abilities, with or without accommodation.

Students with documented disabilities or who believe that they may have a protected disability can request accommodations that may assist with meeting the technical standards for Health Science Programs at WCC. Please contact the WCC Learning Support Services (LSS) office at (734) 973-3342 or email: learningsupport@wccnet.edu

DISCLAIMER: EXAMPLES PROVIDED ARE NOT AN EXHAUSTIVE LIST OF ASSOCIATED TASKS TO MEET PROGRAM TECHNICAL STANDARDS.

Requirements	Standard	Examples
Critical Thinking and Cognitive Competencies	Sufficient critical thinking and cognitive abilities in classroom and clinical settings	Make safe, immediate, well-reasoned clinical judgments. Identify cause/effect relationships in all clinical situations and respond appropriately. Utilize the scientific method and current standards of evidence-based medicine/practice (EBM) to plan, prioritize, and implement patient care. Evaluate the effectiveness of health-related interventions. Accurately follow course syllabi, assignments, directions, academic and facility patient protocols, and any action plan(s) developed by the dean, faculty, administration, or healthcare institution. Measure, calculate, reason, analyze, and/or synthesize data as it applies to patient care and medication administration.
Professionalism	Interpersonal skills sufficient for professional interaction with a diverse population of individuals, families, and groups	Establish effective, professional relationships with clients, families, staff, and colleagues with varied socioeconomic, emotional, cultural, and intellectual backgrounds. Capacity to comply with all ethical and legal standards, including those of the healthcare profession and the corresponding policies of the College and Clinical Placements Facilities. Respond appropriately to constructive criticism. Displays attributes of professionalism such as integrity, honesty, responsibility, accountability, altruism, compassion, empathy, trust, tolerance, and unbiased attitudes.
Communication	Communication sufficient for professional interactions	Explanation of treatment, procedure, initiation of health teaching (e.g., teach-back or show-me method). Accurately obtain information from clients, family members/significant others, health team members, and/or faculty. Documentation and interpretation of health-related interventions and client responses. Read, write, interpret, comprehend, and legibly document in multiple formats using standard English.
Mobility	Physical abilities sufficient for movement from room to room and in small spaces	Functional movement about patient's room, workspaces, and treatment areas. Administer rescue procedures such as cardiopulmonary resuscitation. The physical ability to transition quickly to accommodate patient needs and to maneuver easily in urgent situations for client safety.
Motor Skills	Gross and fine motor abilities that are sufficiently effective and safe for providing Allied Health Care	Ability to effectively calibrate and use radiography equipment, accessories, and ancillary devices as needed for patient imaging. Strength to carry out patient care procedures, such as assisting in the turning and lifting/transferring of patients. Perform and/or assist with expected procedures, treatments, and contrast media administration using appropriate sterile or clean techniques (for example, barium and iodinated contrast administration, CPR, and insertion of catheters for barium-based procedures). Physical endurance is sufficient to complete all required tasks during the assigned period of clinical practice.
Sensory	Auditory and visual ability sufficient for observing, monitoring, and assessing health needs	Ability to detect monitoring device alarms and other emergency signals. Ability to discern sounds and cries for help. Ability to observe client's condition and responses to treatments. Ability to collect information through listening, seeing, smelling, and observation and respond appropriately. Ability to detect foul odors, smoke, changes in skin temperature, skin texture, edema, and other anatomical abnormalities.
Observation	Ability to sufficiently make observations in a health care environment, consistent with program competencies	Accurate interpretation of information obtained from digital, analog, and waveform diagnostic tools such as temperatures, blood pressures, and cardiac rhythms as well as diagnostic tools. Observation and interpretation of the following: client's heart and body sounds, body language, the color of wounds, drainage, urine, feces, expectoration, sensitivity to heat, cold, pain, and pressure, and signs and symptoms of disease, pain, and infection.
Tactile Sense	Tactile ability sufficient for physical assessment	Ability to palpate topographic landmarks for radiographic positioning. Feel vibrations (pulses) to detect temperature changes and palpate veins for cannulation.

Version 6/5/24

Appendix N: ARRT Standards of Ethics

Last Revised: September 1, 2020, Published: September 1, 2020

PREAMBLE

The Standards of Ethics of The American Registry of Radiologic Technologists (ARRT) shall apply solely to persons holding certificates from ARRT that are either currently certified and registered by ARRT or that were formerly certified and registered by ARRT (collectively, "Certificate Holders"), and to persons applying for certification and registration by ARRT in order to become Certificate Holders ("Candidates"). Radiologic Technology is an umbrella term that is inclusive of the disciplines of radiography, nuclear medicine technology, radiation therapy, cardiovascular-interventional radiography, mammography, computed tomography, magnetic resonance imaging, quality management, sonography, bone densitometry, vascular sonography, cardiac-interventional radiography, vascular-interventional radiography, breast sonography, and radiologist assistant. The Standards of Ethics are intended to be consistent with the Mission Statement of ARRT, and to promote the goals set forth in the Mission Statement.

STATEMENT OF PURPOSE

The purpose of the ethics requirements is to identify individuals who have internalized a set of professional values that cause one to act in the best interests of patients. This internalization of professional values and the resulting behavior is one element of ARRT's definition of what it means to be qualified. Exhibiting certain behaviors as documented in the Standards of Ethics is evidence of the possible lack of appropriate professional values.

The Standards of Ethics provide proactive guidance on what it means to be qualified and to motivate and promote a culture of ethical behavior within the profession. The ethics requirements support ARRT's mission of promoting high standards of patient care by removing or restricting the use of the credential by those who exhibit behavior inconsistent with the requirements.

A.CODE OF ETHICS

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

The Code of Ethics is aspirational.

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 race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, familial status, disability, sexual orientation, gender identity, veteran status, age, or any other legally protected basis.

4. The 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.

ARRT STANDARDS OF ETHICS

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

B. RULES OF ETHICS

The Rules of Ethics form the second part of the Standards of Ethics. They are mandatory standards of minimally acceptable professional conduct for all Certificate Holders and Candidates. Certification and registration are methods of assuring the medical community and the public that an individual is qualified to practice within the profession. Because the public relies on certificates and registrations issued by ARRT, it is essential that Certificate Holders and Candidates act consistently with these Rules of Ethics. These Rules of Ethics are intended to promote the protection, safety, and comfort of patients.

The Rules of Ethics are enforceable. R.T.s are required to notify ARRT of any ethics violation, including state licensing issues and criminal charges and convictions, within 30 days of the occurrence or during their annual renewal of certification and registration, whichever comes first. Applicants for certification and registration are required to notify ARRT of any ethics violation, including state licensing issues and criminal charges and convictions, within 30 days of the occurrence.

Certificate Holders and Candidates engaging in any of the following conduct or activities, or who permit the occurrence of the following conduct or activities with respect to them, have violated the Rules of Ethics and are subject to sanctions as described hereunder:
The titles and headings are for convenience only, and shall not be used to limit, alter or interpret the language of any Rule.

Fraud or Deceptive Practices

Fraud Involving Certification and Registration

1. Employing fraud or deceit in procuring or attempting to procure, maintain, renew, or obtain or reinstate certification and registration as issued by ARRT; employment in radiologic technology; or a state permit, license, or registration certificate to practice radiologic technology. This includes altering in any respect any document issued by ARRT or any state or federal agency, or by indicating in writing certification and registration with ARRT when that is not the case.

Fraudulent Communication Regarding Credentials

2. Engaging in false, fraudulent, deceptive, or misleading communications to any person regarding any individual's education, training, credentials, experience, or qualifications, or the status of any individual's state permit, license, or registration certificate in radiologic technology or certificate of registration with ARRT.

Fraudulent Billing Practices

3. Knowingly engaging or assisting any person to engage in, or otherwise participating in, abusive or fraudulent billing practices, including violations of federal Medicare and Medicaid laws or state medical assistance laws.

Subversion Examination / CQR Subversion

4. Subverting or attempting to subvert ARRT's examination process, and/or the Structured Self-Assessments (SSA) that are part of the Continuing Qualifications Requirements (CQR) process. Conduct that subverts or attempts to subvert ARRT's examination and/or CQR SSA process includes, but is not limited to:
    1. (i) disclosing examination and/or CQR SSA information using language that is substantially similar to that used in questions and/or answers from ARRT examinations and/or CQR SSA when such information is gained as a direct result of having been an examinee or a participant in a CQR SSA or having communicated with an examinee or a CQR participant; this includes, but is not limited to, disclosures to students in educational programs, graduates of educational programs, educators, anyone else involved in the preparation of Candidates to sit for the examinations, or CQR participants; and/or
    2. (ii) soliciting and/or receiving examination and/or CQR SSA information that uses language that is substantially similar to that used in questions and/or answers on ARRT examinations or CQR SSA from an examinee, or a CQR participant, whether requested or not; and/or
    3. (iii) copying, publishing, reconstructing (whether by memory or otherwise), reproducing or transmitting any portion of examination and/or CQR SSA materials by any means, verbal or written, electronic or mechanical, without the prior express written permission of ARRT or using professional, paid or repeat examination takers and/or CQR SSA participants, or any other individual for the purpose of reconstructing any portion of examination and/or CQR SSA materials; and/or

4. (iv) using or purporting to use any portion of examination and/or CQR SSA materials that were obtained improperly or without authorization for the purpose of instructing or preparing any Candidate for examination or participant for CQR SSA; and/or
5. (v) selling or offering to sell, buying or offering to buy, or distributing or offering to distribute any portion of examination and/or CQR SSA materials without authorization; and/or
6. (vi) removing or attempting to remove examination and/or CQR SSA materials from an examination or SSA room; and/or
7. (vii) having unauthorized possession of any portion of or information concerning a future, current, or previously administered examination or CQR SSA of ARRT; and/or
8. (viii) disclosing what purports to be ,or what you claim to be , or under all circumstances is likely to be understood by the recipient as, any portion of or “inside” information concerning any portion of a future, current, or previously administered examination or CQR SSA of ARRT; and/or
9. (ix) communicating with another individual during administration of the examination or CQR SSA for the purpose of giving or receiving help in answering examination or CQR SSA questions, copying another Candidate’s or CQR participant’s answers, permitting another Candidate or a CQR participant to copy one’s answers, or possessing or otherwise having access to unauthorized materials including, but not limited to, notes, books, mobile devices, computers and/or tablets during administration of the examination or CQR SSA; and/or
10. (x) impersonating a Candidate, or a CQR participant, or permitting an impersonator to take or attempt to take the examination or CQR SSA on one’s own behalf; and/or
11. (xi) using any other means that potentially alters the results of the examination or CQR SSA such that the results may not accurately represent the professional knowledge base of a Candidate, or a CQR participant.

Education Subversion

5. Subverting, attempting to subvert, or aiding others to subvert or attempt to subvert ARRT’s education requirements, including but not limited to, Continuing Education Requirements (CE), clinical experience and competency requirements, structured education activities, and/or ARRT’s Continuing Qualifications Requirements (CQR). Conduct that subverts or attempts to subvert ARRT’s education or CQR Requirements includes, but is not limited to:
    1. (i) providing false, inaccurate, altered, or deceptive information related to CE, clinical experience or competency requirements, structured education or CQR activities to ARRT or an ARRT recognized recordkeeper; and/or
    2. (ii) assisting others to provide false, inaccurate, altered, or deceptive information related to education requirements or CQR activities to ARRT or an ARRT recognized recordkeeper; and/or
    3. (iii) conduct that results or could result in a false or deceptive report of CE, clinical experience or competency requirements, structured education activities or CQR completion; and/or
    4. (iv) conduct that in any way compromises the integrity of ARRT’s education requirements, including, but not limited to, CE, clinical experience and competency requirements, structured education activities, or CQR Requirements such as sharing answers to the post-tests or self-learning activities, providing or using false certificates of participation, or verifying credits that were not earned or clinical procedures that were not performed.

Failure to Cooperate with ARRT Investigation

6. Subverting or attempting to subvert ARRT's certification and registration processes by: (i) making a false statement or knowingly providing false information to ARRT; or (ii) failing to cooperate with any investigation by ARRT.

Unprofessional Conduct

Failure to Conform to Minimal Acceptable Standards

7. Engaging in unprofessional conduct, including, but not limited to: (i) a departure from or failure to conform to applicable federal, state, or local governmental rules regarding radiologictechnology practice or scope of practice; or, if no such rule exists, to the minimal standards of acceptable andprevailing radiologic technology practice;

(ii) any radiologic technology practice that may create unnecessary danger to a patient's life, health, or safety.Actual injury to a patient or the public need not be established under this clause.

Sexual Misconduct

8. Engaging in conduct with a patient that is sexual or may reasonably be interpreted by the patient as sexual, or in any verbal behavior that is seductive or sexually demeaning to a patient; or engaging in sexual exploitation of a patient or former patient. This also applies to any unwanted sexual behavior, verbal or otherwise.

Unethical Conduct

9. Engaging in any unethical conduct, including, but not limited to, conduct likely to deceive, defraud, or harm the public; or demonstrating a willful or careless disregard for the health, welfare, or safety of a patient. Actual injury need not be established under this clause.

Scope of Practice Technical Incompetence

10. Performing procedures which the individuals not competent to perform through appropriate training and/education experience unless assisted or personally supervised by someone who is competent (through training and/or education or experience).

Improper Supervision in Practice

11. Knowingly assisting, advising, or allowing a person without a current and appropriate state permit, license, registration, or an ARRT registered certificate to engage in the practice of radiologic technology, in a jurisdiction that mandates such requirements.

Improper Delegation or Acceptance of a Function

12. Delegating or accepting the delegation of a radiologic technology function or any other prescribed healthcare function when the delegation or acceptance could reasonably be expected to create an unnecessary danger to a patient's life, health, or safety. Actual injury to a patient need not be established under this clause.

Fitness to Practice

Actual or Potential Inability to Practice

13. Actual or potential inability to practice radiologic technology with reasonable skill and safety to patients by reason of illness; use of alcohol, drugs, chemicals, or any other material; or as a result of any mental or physical condition.

Inability to Practice by Judicial Determination

14. Adjudication as mentally incompetent, mentally ill, chemically dependent, or dangerous to the public, by a court of competent jurisdiction.

Improper Management of Patient Records

False or Deceptive Entries

15. Improper management of patient records, including failure to maintain adequate patient records or to furnish a patient record or report required by law; or making, causing, or permitting anyone to make false, deceptive, or misleading entry in any patient record.

Failure to Protect Confidential Patient Information

16. Revealing a privileged communication from or relating to a former or current patient, except when otherwise required or permitted by law, or viewing, using, releasing, or otherwise failing to adequately protect the security or privacy of confidential patient information.

Knowingly Providing False Information

17. Knowingly providing false or misleading information that is directly related to the care of a former or current patient.

Violation of State or Federal Law or Regulatory Rule Narcotics or Controlled Substances Law

18. Violating a state or federal narcotics or controlled substance law, even if not charged or convicted of a violation of law.

Regulatory Authority or Certification Board Rule

19. Violating a rule adopted by a state or federal regulatory authority or certification board resulting in the individual's professional license, permit, registration or certification being denied, revoked, suspended, placed on probation or a consent agreement or order, voluntarily surrendered, subjected to any conditions, or failing to report to ARRT any of the violations or actions identified in this Rule.

Criminal Proceedings

20. Convictions, criminal proceedings, or military courts-martial as described below:
    1. (i) conviction of a crime, including, but not limited to, a felony, a gross misdemeanor, or a misdemeanor.

All alcohol and/or drug related violations must be reported; and/or

    2. (ii) criminal proceeding where a finding or verdict of guilt is made or returned but the adjudication of guilt is either withheld, deferred, or not entered or the sentence is suspended or stayed; or a criminal proceeding where the individual enters an Alford plea, a plea of guilty or nolo contendere (no contest); or where the individual enters into a pre-trial diversion activity; and/or
    3. (iii) military courts-martial related to any offense identified in these Rules of Ethics; and/or
    4. (iv) required sex offender registration.

Duty to Report

Failure to Report Violation

21. Knowing of a violation or a probable violation of any Rule of Ethics by any Certificate Holder or Candidate and failing to promptly report in writing the same to ARRT.

Failure to Report Error

22. Failing to immediately report to the Certificate Holder's or Candidate's supervisor information concerning an error made in connection with imaging, treating, or caring for a patient. For purposes of this rule, errors include any departure from the standard of care that reasonably may be considered to be potentially harmful, unethical, or improper (commission). Errors also include behavior that is negligent or should have occurred in connection with a patient's care, but did not (omission). The duty to report under this rule exists whether or not the patient suffered any injury.

C. ADMINISTRATIVE PROCEDURES

These Administrative Procedures provide for the structure and operation of the Ethics Committee; they detail procedures followed by the Ethics Committee and by the Board of Trustees of ARRT in handling challenges raised under the Rules of Ethics, and in handling matters relating to the denial of an application for certification and registration (for reasons other than failure to meet the criteria as stated in Article II, Sections 2.03 and 2.04 of the Rules and Regulations of ARRT, in which case, there is no right to a hearing) or the denial of renewal or reinstatement of certification and registration. All Certificate Holders and Candidates are required to comply with these Administrative Procedures. All Certificate Holders and Candidates are expected to conduct themselves professionally and respectfully in their interactions with the ARRT Board of Trustees, Ethics Committee and/or staff. Failure to cooperate with the Ethics Committee or the Board of Trustees in a proceeding involving a challenge or ethics review may be considered by the Ethics Committee and by the Board of Trustees according to the same procedures and with the same sanctions as failure to observe the Rules of Ethics.

1. Ethics Committee

(a) Membership and Responsibilities of the Ethics Committee

The President, with the approval of the Board of Trustees, appoints at least three Trustees to serve as members of the Ethics Committee, each such person to serve on the Committee until removed and replaced by the President, with the approval of the Board of Trustees, at any time, with or without cause. The President, with the approval of the Board of Trustees, will also appoint a fourth, alternate member to the Committee. The alternate member will participate on the Committee in the event that one of the members of the Ethics Committee is unable to participate. The Ethics Committee is responsible for: (1) investigating each alleged breach of the Rules of Ethics and determining whether a Certificate Holder or Candidate has failed to observe the Rules of Ethics and determining an appropriate sanction; and (2) periodically assessing the Code of Ethics, Rules of Ethics, and Administrative Procedures and recommending any amendments to the Board of Trustees.

(b) The Chair of the Ethics Committee

The President, with the approval of the Board of Trustees, appoints one member of the Ethics Committee as the Committee's Chair to serve for a term of two years as the principal administrative officer responsible for management of the promulgation, interpretation, and enforcement of the Standards of Ethics. The President may remove and replace the Chair of the Committee, with the approval of the Board of Trustees, at any time, with or without cause. The Chair presides at and participates in meetings of the Ethics Committee and is responsible directly and exclusively to the Board of Trustees, using staff, legal counsel, and other resources necessary to fulfill the responsibilities of administering the Standards of Ethics.

(c) Preliminary Screening of Potential Violations of the Rules of Ethics

The Chair of the Ethics Committee shall review each alleged violation of the Rules of Ethics that is brought to the attention of the Ethics Committee. If, in the sole discretion of the Chair: (1) there is insufficient information upon which to base a charge of a violation of the Rules of Ethics; or (2) the allegations against the Certificate Holder or Candidate are patently frivolous or inconsequential; or (3) the allegations, if true, would not constitute a violation of the Rules of Ethics, the Chair may summarily dismiss the matter. The Chair may be assisted by staff and/or legal counsel of ARRT. The Chair shall report each such summary dismissal to the Ethics Committee.

At the Chair's direction and upon request, the Chief Executive Officer of ARRT shall have the power to investigate allegations regarding the possible settlement of an alleged violation of the Rules of Ethics. The Chief Executive Officer may be assisted by staff members and/or legal counsel of ARRT. The Chief Executive Officer is not empowered to enter into a binding settlement, but rather may convey and/or recommend proposed settlements to the Ethics Committee. The Ethics Committee may accept the proposed settlement, make a counterproposal to the Certificate Holder or Candidate, or reject the proposed settlement and proceed under these Administrative Procedures.

2. Hearings

Whenever ARRT proposes to take action in respect to the denial of an application for certification and registration (for reasons other than failure to meet the criteria as stated in Article II, Sections 2.03 and 2.04 of the Rules and Regulations of ARRT, in which case there is no right to a hearing) or of an application for renewal or reinstatement of certification and registration, or in connection with the revocation or suspension of certification and registration, or the censure of a Certificate Holder or Candidate for an alleged violation of the Rules of Ethics, it shall give written notice thereof to such person, specifying the reasons for such proposed action. A Certificate Holder or Candidate to whom such notice is given shall have 30 days from the date the notice of such proposed action is mailed to make a written request for a hearing. The written request for a hearing must be accompanied by a nonrefundable hearing fee in the amount of $100. In rare cases, the hearing fee may be waived, in whole or in part, at the sole discretion of the Ethics Committee.

Failure to make a written request for a hearing and to remit the hearing fee (unless the hearing fee is waived in writing by ARRT) within such period or submission of a properly executed Hearing Waiver form within such period shall constitute consent to the action taken by the Ethics Committee or the Board of Trustees pursuant to such notice. A Certificate Holder or Candidate who requests a hearing in the manner prescribed above shall advise the Ethics Committee of the intention to appear at the hearing. A Certificate Holder or Candidate who requests a hearing may elect to appear in person, via teleconference, or by a written submission which shall be verified or acknowledged under oath.

A Certificate Holder or Candidate may waive the 30 day timeframe to request a hearing. To request a waiver of the 30 day timeframe, the Certificate Holder or Candidate must complete a Hearing Waiver form that is available on the ARRT website at www.arrt.org. The Hearing Waiver form must be signed by the Certificate Holder or Candidate, notarized, and submitted to ARRT. The Chief Executive Officer of ARRT shall have the authority to receive, administer, and grant the Hearing Waiver form and may be assisted by staff members and/or legal counsel of ARRT.

Failure to appear at the hearing in person or via teleconference, or to supply a written submission in response to the charges shall be deemed a default on the merits and shall be deemed consent to whatever action or disciplinary measures that the Ethics Committee determines to take. Hearings shall be held at such date, time, and place as shall be designated by the Ethics Committee or the Chief Executive Officer. The Certificate Holder or Candidate shall be given at least 30 days notice of the date, time, and place of the hearing. The hearing is conducted by the Ethics Committee with any three or more of its members participating, other than any member of the Ethics Committee whose professional activities are conducted at a location in the approximate area of the Certificate Holder or Candidate in question. In the event of such disqualification, the President may appoint a

Trustee to serve on the Ethics Committee for the sole purpose of participating in the hearing and rendering a decision. At the hearing, ARRT shall present the charges against the Certificate Holder or Candidate in question, and the facts and evidence of ARRT in respect to the basis or bases for the proposed action or disciplinary measure. The Ethics Committee may be assisted by legal counsel. The Certificate Holder or Candidate in question, by legal counsel or other representative (at the sole expense of the Certificate Holder or Candidate in question), shall have the right to call witnesses, present testimony, and be heard in the Certificate Holder's or Candidate's own defense; to hear the testimony of and to cross-examine any witnesses appearing at such hearing; and to present such other evidence or testimony as the Ethics Committee shall deem appropriate to do substantial justice. Any information may be considered that is relevant or potentially relevant. The Ethics Committee shall not be bound by any state or federal rules of evidence. The Certificate Holder or Candidate in question shall have the right to submit a written statement at the close of the hearing. A transcript or an audio recording of the hearing testimony is made for in person and teleconference hearings only. Ethics Committee deliberations are not recorded.

In the case where ARRT proposes to take action in respect to the denial of an application for certification and registration (for reasons other than failure to meet the criteria as stated in Article II, Sections 2.03 and 2.04 of the Rules and Regulations of ARRT) or the denial of renewal or reinstatement of certification and registration, the Ethics Committee shall assess the evidence presented at the hearing and make its decision accordingly, and shall prepare written findings of fact and its determination as to whether grounds exist for the denial of an application for certification and registration or renewal or reinstatement of certification and registration, and shall promptly transmit the same to the Board of Trustees and to the Certificate Holder or Candidate in question.

In the case of alleged violations of the Rules of Ethics by a Certificate Holder or Candidate, the Ethics Committee shall assess the evidence presented at the hearing and make its decision accordingly, and shall prepare written findings of fact and its determination as to whether there has been a violation of the Rules of Ethics and, if so, the appropriate sanction, and shall promptly transmit the same to the Board of Trustees and to the Certificate Holder or Candidate in question. Potential sanctions include denial of renewal or reinstatement of certification and registration with ARRT, revocation or suspension of certification and registration with ARRT, or the public or private reprimand of a Certificate Holder or Candidate. Unless a timely appeal from any findings of fact and determination by the Ethics Committee is taken to the Board of Trustees in accordance with Section 3 below (Appeals), the Ethics Committee's findings of fact and determination in any matter (including the specified sanction) shall be final and binding upon the Certificate Holder or Candidate in question.

3. Appeals

Except as otherwise noted in these Administrative Procedures, the Certificate Holder or Candidate may appeal any decision of the Ethics Committee to the Board of Trustees by submitting a written request for an appeal within 30 days after the decision of the Ethics Committee is mailed. The written request for an appeal must be accompanied by a nonrefundable appeal fee in the amount of $250. In rare cases, the appeal fee may be waived, in whole or in part, at the sole discretion of the Ethics Committee.

Failure to make a written request for an appeal and to remit the appeal fee (unless the appeal fee is waived in writing by ARRT) within such period or submission of a properly executed Appeal Waiver

form within such period shall constitute consent to the action taken by the Ethics Committee or Board of Trustees pursuant to such notice.

A Certificate Holder or Candidate may waive the 30 day timeframe to request an appeal. To request a waiver of the 30 day timeframe, the Certificate Holder or Candidate must complete an Appeal Waiver form that is available on the ARRT website at www.arrt.org. The Appeal Waiver form must be signed by the Certificate Holder or Candidate, notarized, and submitted to ARRT. The Chief Executive Officer of ARRT shall have the authority to receive, administer, and grant the Appeal Waiver form and may be assisted by staff members and/or legal counsel of ARRT.

In the event of an appeal, those Trustees who participated in the hearing of the Ethics Committee shall not participate in the appeal. The remaining members of the Board of Trustees shall consider the decision of the Ethics Committee, the files and records of ARRT applicable to the case at issue, and any written appellate submission of the Certificate Holder or Candidate in question, and shall determine whether to affirm or to modify the decision of the Ethics Committee or to remand the matter to the Ethics Committee for further consideration. In making such determination to affirm or to modify, findings of fact made by the Ethics Committee shall be conclusive if supported by any evidence. The Board of Trustees may grant re-hearings, hear additional evidence, or request that ARRT or the Certificate Holder or Candidate in question provide additional information in such manner, on such issues, and within such time as it may prescribe. All hearings and appeals provided for herein shall be private at all stages. It shall be considered an act of professional misconduct for any Certificate Holder or Candidate to make an unauthorized publication or revelation of the same, except to the Certificate Holder's or Candidate's attorney or other representative, immediate superior, or employer.

4. Adverse Decisions

(a) Private Reprimands

A private reprimand is a reprimand that is between the individual and ARRT and is not reported to the public. Private reprimands allow for continued certification and registration.

(b) Public Reprimands

A public reprimand is a sanction that is published on ARRT's website for a period of one year. Public reprimands allow for continued certification and registration.

(c) Conditional

Conditional status may be given for continued certification and registration in those cases where there are additional requirements that need to be met before the ethics file can be closed (e.g., court, regulatory authority and/or Ethics Committee conditions).

(d) Suspensions

Suspension is the temporary removal of an individual's certification and registration in all categories for up to one year.

(e) Summary Suspensions

Summary suspension is an immediate suspension of an individual's certification and registration in

all categories. If an alleged violation of the Rules of Ethics involves the occurrence, with respect to a Certificate Holder, of an event described in the Rules of Ethics, or any other event that the Ethics Committee determines would, if true, potentially pose harm to the health, safety, or well being of any patient or the public, then, notwithstanding anything apparently or expressly to the contrary contained in these Administrative Procedures, the Ethics Committee may, without prior notice to the Certificate Holder and without a prior hearing, summarily suspend the certification and registration of the Certificate Holder pending a final determination under these Administrative Procedures with respect to whether the alleged violation of the Rules of Ethics in fact occurred. Within five working days after the Ethics Committee summarily suspends the certification and registration of a Certificate Holder in accordance with this provision, the Ethics Committee shall, by certified mail, return receipt requested, give to the Certificate Holder written notice that describes: (1) the summary suspension;

(2) the reason or reasons for it; and (3) the right of the Certificate Holder to request a hearing with respect to the summary suspension by written notice to the Ethics Committee, which written notice must be received by the Ethics Committee not later than 15 days after the date of the written notice of summary suspension by the Ethics Committee to the Certificate Holder. If the Certificate Holder requests a hearing in a timely manner with respect to the summary suspension, the hearing shall be held before the Ethics Committee or a panel comprised of no fewer than three members of the Ethics Committee as promptly as practicable, but in any event within 30 days after the Ethics Committee's receipt of the Certificate Holder's request for the hearing, unless both the individual and the Ethics Committee agree to a postponement beyond the 30 day period. The Ethics Committee has the absolute discretion to deny any request for a postponement and to proceed to a hearing with or without the participation of the individual. The applicable provisions of Section 2 (Hearings) of these Administrative Procedures shall govern all hearings with respect to summary suspensions, except that neither a determination of the Ethics Committee, in the absence of a timely request for a hearing by the affected Certificate Holder, nor a determination by the EthicsCommittee or a panel, following a timely requested hearing, is appealable to the Board of Trustees.

(f) Ineligible

An individual may be determined ineligible for certification and registration or ineligible for reinstatement of certification and registration. The time frame may be time limited or permanent.

(g) Revocation

Revocation removes the individual's certification and registration in all categories. The time frame may be time limited or permanent.

(h) Alternative Dispositions

An Alternative Disposition ("AD") is a contract between an individual and the ARRT Ethics Committee that allows for continued certification and registration in lieu of revocation, provided the individual performs certain requirements, including, but not limited to, providing documentation, attending counseling and/or submitting to random drug and/or alcohol screening. A Certificate Holder or Candidate who voluntarily enters into an Alternative Disposition Agreement agrees to waive all rights set forth in these Administrative Procedures.

(i) Civil or Criminal Penalties

Conduct that violates ARRT's Rules of Ethics may also violate applicable state or federal law. In addition to the potential sanctions under the Standards of Ethics, ARRT may, without giving prior notice, pursue civil and/or criminal penalties against the Certificate Holder or Candidate.

5. Publication of Adverse Decisions

Summary suspensions and final decisions (other than private reprimands) that are adverse to the Certificate Holder or Candidate will be communicated to the appropriate authorities of certification organizations and state licensing agencies and provided in response to written inquiries into an individual's certification and registration status. The ARRT shall also have the right to publish any final adverse decisions and summary suspensions and the reasons therefore. For purposes of this paragraph, a "final decision" means and includes: a determination of the Ethics Committee relating to an adverse decision if the affected Certificate Holder or Candidate does not request a hearing in a timely manner; a non-appealable decision of the Ethics Committee; an appealable decision of the Ethics Committee from which no timely appeal is taken; and, the decision of the Board of Trustees in a case involving an appeal of an appealable decision of the Ethics Committee.

6. Procedure to Request Removal of a Sanction

A sanction imposed by ARRT, including a sanction specified in a Settlement Agreement, specifically provides a sanction time frame and it shall be presumed that a sanction may only be reconsidered after the time frame has elapsed. At any point after a sanction first becomes eligible for reconsideration, the individual may submit a written request ("Request") to ARRT asking the Ethics Committee to remove the sanction. The Request must be accompanied by a nonrefundable fee in the amount of $250.

A Request that is not accompanied by the fee will be returned to the individual and will not be considered. In rare cases, the fee may be waived, in whole or in part, at the sole discretion of the Ethics Committee. The individual is not entitled to make a personal appearance before the Ethics Committee in connection with a Request to remove a sanction or to modify a Settlement Agreement. Although there is no required format, Requests for both sanction removal and Settlement Agreement modification must include compelling reasons justifying the removal of the sanction or modification of the Settlement Agreement. It is recommended that the individual demonstrate at least the following: (1) an understanding of the reasons for the sanction; (2) an understanding of why the action leading to the sanction was felt to warrant the sanction imposed; and (3) detailed information demonstrating that the Certificate Holder's or Candidate's behavior has improved and similar activities will not be repeated. Letters of recommendation from individuals, who are knowledgeable about the person's sanction imposed; and current character and behavior, including efforts at rehabilitation, are advised. If a letter of recommendation is not on original letterhead or is not duly notarized, the Ethics Committee shall have the discretion to ignore that letter of recommendation.

Removal of the sanction is a prerequisite to apply for certification and registration. If, at the sole discretion of the Ethics Committee, the sanction is removed, the individual will be allowed to pursue certification and registration via the policies and procedures in place at that time as stated in Section 6.05 of the ARRT Rules and Regulations.

If the Ethics Committee denies a Request for removal of the sanction or modification of a Settlement Agreement, the decision is not subject to a hearing or to an appeal, and the Committee will not reconsider removal of the sanction or modification of the Settlement Agreement for as long as is directed by the Committee.

7. Amendments to the Standards of Ethics

The ARRT reserves the right to amend the Standards of Ethics following the procedures under Article XI, Section 11.02 of the ARRT Rules and Regulations.

Please see the ARRT Standards of Ethics here.

Appendix O: Radiography Program Faculty, Staff, and Clinical Preceptors

WCC Administrators

Dean Shari Lambert DNP, RN Health Sciences Department	Washtenaw Community College TI Building Room TI 234 A (734) 973-3475
Allied Health Department Chair Tina Sprague, CDA, RDA, BS FADAA	Washtenaw Community College Occupational Education Building Room OE 102NN (734) 973-3337
Program Director William Nelson, MA, RT(R)	Washtenaw Community College Occupational Education Building Room 102 OO (734) 677-5119
Instructor Professional Faculty James N. Skufis, MA, RT(R)(T)(CT)	Washtenaw Community College Occupational Education Building Room 102 L (734) 477-8527
Clinical Coordinator Erin Hammond, MHA, RT(R)	Washtenaw Community College Occupational Education Building Room 102 K (734) 249-5631

Clinical Preceptors	**Clinical Education Centers**
Nicole Ayers, RT(R) Sandra Wilson, RT(R)	Ascension Providence Hospital - Novi Campus 47601 Grand River Ave. Novi, MI 48374 (248) 465-4373
Christina Mrrphy RT(R)	Corewell Health Hospital- Oakwood Wayne 33155 Annapolis Ave. Wayne, MI 48184 (734) 467-4193
Aaron Brady, RT(R) Angela Wygonik, RT(R)	Corewell Health Hospital-Dearborn 18101 Oakwood Blvd. Dearborn, MI 48124 (313) 593-7000
Glen Page, RT(R)	Corewell Health Hospital-Taylor 10000 Telegraph Road Taylor, MI 48180 (313) 295-5044
Katie Baker, RT(R) Tori Cox, RT(R)	Corewell Health Hospital-Trenton 5450 Fort St Trenton, MI 48183 (734) 671-3892
Maureen Humphries, RT(R)	DMC Children's Hospital of Michigan 3901 Beaubien Detroit, MI 48201 (313) 745-5459
Windy Gorski, RT(R)	Henry Ford West Bloomfield Hospital

Kelsey Lamparski, RT(R)	6777 W. Maple Rd West Bloomfield, MI 48322 (248) 325-1000
Amanda Brewer, RT(R) Bobbi Gilbee, RT(R)	Henry Ford Wyandotte Hospital 2333 Biddle Road Wyandotte, MI 48192 (734) 287-8135
Nate Wade, RT(R) Taylor Jagodzinski, RT(R) Corrie Castro, RT(R) Leigha Davis,RT(R) Marybeth Lehmann, RT(R) Kaitlyn Nieport, RT(R) Valerie Maraugha, RT(R) Maegan Spina, RT(R) Jenna Wenninger, RT(R)	Michigan Medicine University Hospital/TC/CC/CVC 1500 E Medical Center Dr. Ann Arbor, MI 48109
Heather Kinsey, RT(R) Nichole Carpenter, RT(R) Lindsay Green, RT(R)	Michigan Medicine Mott Children's Hospital 1540 E Hospital Dr. Ann Arbor, MI 48109
Crystal Hill, RT(R) Kirsten Skope, RT(R)	Michigan Medicine Brighton Center for Specialty Care 7500 Challis Rd Brighton, MI 48116
Cindy Wolfe, RT(R)	Michigan Medicine East Ann Arbor Health Center 4260 Plymouth Rd. Ann Arbor, MI 48109
Megan Thornton, RT(R)	Michigan Medicine Canton Health Center 1051 N. Canton Center Rd. Canton, MI 48187
Melissa Kiel, RT(R)	Michigan Medicine Livonia Center for Specialty Care 19900 Haggerty Rd, Suite #101 Livonia, MI 48152
Melissa Kiel, RT(R)	Michigan Medicine Northville Health Center 39901 Traditions Dr Northville, MI 48168
Kelly Radojevic, RT(R)	Michigan Medicine West Ann Arbor 380 Parkland Plaza Ann Arbor, MI 48103
Kelly Hewitt, RT(R)	Michigan Medicine Briarwood 1901 Briarwood Circle Bldg 9 Ann Arbor, MI 48108
Denis Bausick, RT(R)	Michigan Medicine Dominos Farms 24 Frank Lloyd Wright Drive, Lobby A, Ste. 1000 Ann Arbor, MI 48105 (734) 936-7070
Frankie Plasters, RT(R)	Michigan Medicine South Main 2098 S. Main St. Ann Arbor, MI 48103
Joy Baker, RT(R) Rebekah Niethold, RT(R)	ProMedica Regional Hospital Monroe 718 N. Macomb Monroe, MI 48161

	(734) 240-5648
Ashley Dupuis, RT(R)	Trinity Health- Ann Arbor (St. Joseph Mercy Ann Arbor) 5301 McCauley Dr. Ypsilanti, MI 48197 (734) 712-3074
Brynne Schleiger, RT(R)	Trinity Health—Chelsea(St. Joseph Mercy Chelsea) 775 S. Main St. Chelsea, MI 48118 (734) 593-5500
Holly Johnson, RT(R)(M)	Trinity Health—Livingston (St. Joseph Mercy – Livingston) 620 Bryon Street Howell, MI 48843 (517) 545-6038
Kimberly Presutti, RT(R) Krystal Johnston, RT(R)	Trinity Health—Livonia (St. Mary Mercy Livonia) 36475 West Five Mile Rd. Livonia, MI 48154 (734) 655-2878
Karen Grant, RT(R)(BD)	Trinity Health--Brighton (St. Josep Mercy Health Center – Brighton) 7575 Grand River Road Brighton, MI 48114 (810) 844-7548
Nicole Wirgau, RT(R)	Trinity Health—Canton (St.Joseph Mercy- Canton) 1600 S. Canton Center Road Canton, MI 48188 (734) 398-7593
Allen Parran, RT(R) Serena Conklin, RT(R)	Veterans Administration Hospital 2215 Fuller Road Ann Arbor, MI 48105 (734) 769-7100

Appendix P: Pregnancy Declaration Form

Washtenaw Community College | RADIOGRAPHY

WCC Pregnancy Declaration Form

Student Information:

Name: _____

Student ID Number: _____

Date:_____

Declaration of Pregnancy:

I, _____ (print full name), voluntarily declare that I am pregnant. This declaration is made under the radiography program's policy and guidelines.

Estimated Date of Conception: _____

Estimated Due Date:_____

I acknowledge that I have been informed of my rights under Title IX, as outlined on the WCC website under Pregnant Student Rights. I understand that:

1. I have the right to declare or not declare my pregnancy voluntarily.
2. I may choose to continue in the program without modification.
3. I may elect to take an excused pregnancy leave from the program for one year and be readmitted the following year.
4. If I take a leave of absence, I must register for the RAD 189 course the semester before reentering the program to evaluate my clinical competency level.
5. If I do not return to the program after one year, I must reapply, and the need to repeat previously completed coursework will be reviewed on a case-by-case basis.
6. **I have the right to withdraw this pregnancy declaration at any time, in writing, without penalty or explanation.**

Withdrawal of Declaration:
I understand that I may withdraw this declaration at any time by submitting a written notice to the Radiation Safety Officer/Program Director. Upon withdrawal, I will no longer be considered a declared pregnant student, and the program's standard policies and procedures will apply.

Acknowledgment and Signature:

I have read and understand the radiography program's policy regarding pregnancy, my rights under Title IX, and my right to withdraw this declaration at any time. I voluntarily make this declaration and acknowledge the options available to me.

I understand that my education as a student radiographer may put me at risk of radiation exposure and therefore agree to hold harmless the Washtenaw Community College Radiography Program, or any clinical affiliate for any defects and/or injury that may result from exposure to radiation during the educational program. I understand it is my responsibility to comply with all radiation safety rules established by the Program and the clinical site to keep radiation exposure to myself and my unborn child to a minimum.

I have consulted with my physician and have obtained written permission to perform the duties outlined by the Program without restriction.

I understand that I have the right to revoke this declaration at any time during the pregnancy and that the revocation must be in writing.

Student Signature: _____ Date: _____

Radiation Safety Officer/ Program Director Acknowledgment:
I have received and reviewed the pregnancy declaration with the student and have informed her of her rights and options under the program's policy, including her right to withdraw the declaration at any time.

Program Director: _____

Signature: _____ Date: _____