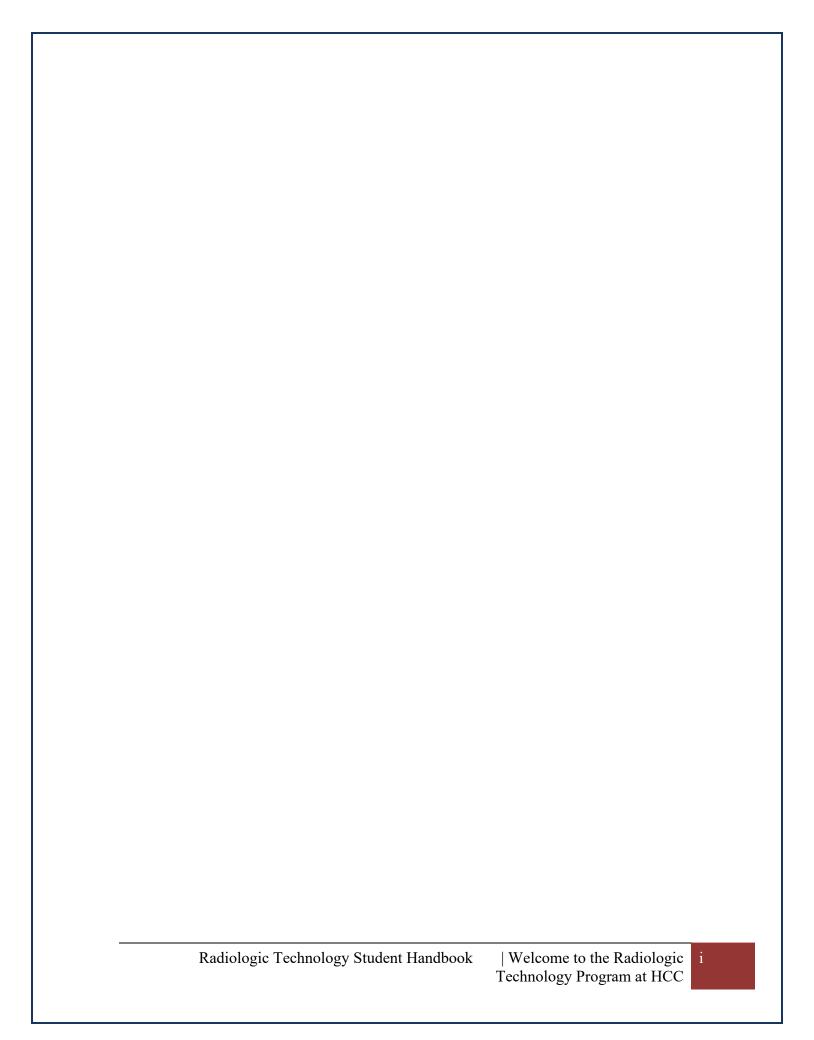


Radiologic Technology Program

STUDENT HANDBOOK

(Summer 2022 - Spring 2023)

May 2022



1	Welcome to the Radiologic Technology Program at HCC Mission, Vision, and Program Goals		
2			
	2.1 Mission state	ment	3
	2.2 Vision		3
	0 0	ls	3
3	Course Offering	s	4
4	Program Facult	y and Staff	5
5	Program Expenses and Student Resources		
	5.1 Tuition		6
		on and Parking	
		s costs	
		urces and Services	7
6	Academic stand	ards	8
		Ethics	
		nesty	
		and Networking	
	_	l, and Smoking	
		Policy	
		ence Policy	
		nd Clinical conduct	
		nical Attendance or Other Documents	
		onic Devices	
	•		
		oolicy	
		ard admission to HCC credit courses	
		sion to Radiologic Technology Program Dismissal, and Readmission	
	•	equirements	
		equirements	
		nic Complaints	
		cademic Complaint Procedures	
7		•	18
	7.1 HS Division a	ward	18
		nor Society Selection Requirements	
8	_		19
9	Clinical Rotation		21
	9.1 Clinical On-b	oarding Documents	21

9.1	.1 Health Requirements	. 21
9.1	.2 Health and Liability Insurance	. 22
9.2	Change in Health Status Policy	. 23
9.3	Education Requirements for ARRT Certification	. 23
9.4	Uniform	24
9.5	Clinical Evaluation and Grading	25
9.6	Professional Conduct	26
9.7	Conduct Violations	26
9.8	At-Risk Behaviors	
9.9	Incident reporting / Overexposure	. 29
9.10	Clinical Administration and Clinical Data Tracking	. 29
8.1	0.1 Clinical Equipment and Examination Room Objectives	. 33
9.11	Clinical Sites	
9.1	1.1 Clinical Site Placement Procedure	34
9.1	1.2 Clinical Competency Requirements	
9.1	1.3 Semester Competency Planning	
-	1.4 RADT Observational and Advanced Modalities Rotation	
9.12	Clinical Make-Up	
9.13	Tipping	
9.14	IR Markers	
9.15	Supervision	
9.16	Confidentiality/HIPAA/OSHA	
	Clinical Site Requirements:	40
10 Ra	diation Protection Policy and Procedure	42
10.1	General Radiation Protection Policy and Procedure	42
10.2	Personal Monitoring Badges	42
10.3	Annual Occupational Dose Limits:	42
10.4	Provision for Pregnant Student	43
10.5	Exceeding dose limits	44
11 Inf	fection Control	45
11.1	General Principles	45
11.2	Precautions	
11.3	Procedures	45
11.4	Infection Control during performing CPR	47
11.5	Exposure Incident.	47

1 Welcome to the Radiologic Technology Program at HCC

This Program Student Handbook is a student's guide for the Radiologic Technology (RADT) Program at Howard Community College (HCC). Policies and procedures for the program are included in this handbook. Howard Community College (HCC) policies may be found in the College Catalog at http://howardcc.smartcatalogiq.com/en and in the HCC Student Handbook at https://www.howardcc.edu/student-life/student-handbook. It is the responsibility of each student to read and understand the contents of the Program Student Handbook, HCC Student Handbook, and the HCC policies in the College Catalog. After reading, each student is required to sign and return the receipt on the last page of this Program Student Handbook.

The Radiologic Technology Program is in the state-of-the-art Health Sciences Building. The training is rigorous and comprehensive. The skills laboratory (HS 264) is equipped with a computed radiography (CR) and direct radiography (DR) units, a C-Arm, a DR portable x-ray units and CR image processor. Student skills lab training include patient care, radiographic procedure skills, and CR and DR image production and archiving. Students produce radiographs utilizing phantoms.

The program is accredited by The Joint Review Committee on Education in Radiologic Technology (JRCERT) and complies with required Standards for Accreditation in Radiography, which may be accessed via JRCERT website. The current accreditation award was granted on April 25, 2014, for an 8-year period. Standard 1 objective 1.5 of the JRCERT self-study stipulates that program assure students and faculty are aware of the JRCERT Standards for an Accredited Educational Program in Radiography and the avenue to pursue allegations of noncompliance with the Standards. The contact information for the JRCERT is as follows:

Joint Review Committee on Education in Radiologic Technology 20 N. Wacker Drive, Suite 2850 Chicago, IL 60606-3182 312.704.5300 ● (Fax) 312.704.5304 www.jrcert.org

Faculty members welcome you to the program and stand ready to help you achieve your objective of becoming a Radiologic Technologist RT (R). We thank you for choosing HCC. You will be an asset in the process of building the program. We believe we can coach you and provide you with all necessary resources to perform your duties as a competent radiologic technologist upon graduation. Please visit the Radiologic Technology Program Website for additional information including Outcomes for Programmatic Effectiveness, Clinical Site locations, and other important program field related links.

Disclaimer

This Program Student Handbook is reviewed every year and may be amended from time to time. The Program maintains the right to make modifications. A current copy of the Handbook is posted on the program's webpage and in the "Documents" folder of the Clinical Management System - Trajecsys. Any amendment made to the Handbook is communicated to students in a timely fashion via email. Students can access the electronic copy of the Handbook on the program's webpage or via the Clinical Management System. The student may print a hard copy of the updated Handbook, if preferred.

2 Mission, Vision, and Program Goals

2.1 Mission statement

The mission of the Howard Community College, Radiologic Technology Program is to recruit, educate, and prepare clinically competent students to become entry level radiographers.

2.2 Vision

The Radiologic Technology Program is a dynamic and creative learning community, where students are able to discover greatness in themselves and others.

2.3 **Program goals**

At the end of the radiologic science program, the students will be able to:

- 1. Practice as a clinically competent entry-level technologist.
- 2. Display strong critical thinking and problem-solving skills.
- 3. Demonstrate communication skills in a healthcare setting.
- 4. Conduct their duties in an ethical and professional manner with clear understanding of cultural diversity and healthcare access inequity.
- 5. Display proficiency in digital imaging skills.

Student learning goals and outcomes are an integral part the Radiologic Technology Program at Howard Community College and drive programmatic improvement. The student learning goals and outcomes are available to students through the program website. In addition, Program Effectiveness Data is available on the program website at this link - https://www.howardcc.edu/programs-courses/academics/academic-divisions/health-sciences/radiologic-tech/HCC%20Program_Effectiveness_Data_RAD_RT_2021.pdf.

3 Course Offerings

The Howard Community College Radiologic Technology (HCC-RADT) Program provides a well-structured, competency-based curriculum that prepares students to practice as entry level radiographers. The program follows the latest <u>American Society of Radiologic Technologists professional curriculum</u>, which is a JRCERT-adopted curriculum. The HCC- RADT curriculum is well-structured, appropriately sequenced, and is designed to facilitate evaluation of student achievement. According to the ASRT, the curriculum is "designed to ensure that entry-level radiographers possess the technical skills outlined in the ASRT Radiography Practice Standards (ASRT, 2017)."

The contents of the curriculum and sequence of courses and sections are structured as didactic, laboratory, and clinical courses. Similar to the ASRT objectives, the didactic courses are designed to prepare students for the laboratory and clinical rotations and promote qualities that are necessary for graduates to practice duties of a radiographer competently, become critical thinkers, provide appropriate patient care, communicate effectively, and keep abreast of current advancements within the profession.

The laboratory courses are competency-based and appropriately sequenced to allow effective student learning by providing didactic foundation and hands on practice prior to performing procedures in a clinical setting. Similarly, the clinical courses are competency-based and appropriately sequenced. Students apply and refine their knowledge and skills in a clinical setting. The clinical rotations are designed for continuous knowledge and skills improvement until students develop skills necessary to perform radiographs independently under appropriate supervision. The current ARRT list of required mandatory and elective competencies is used to determine the number of competencies a student must complete during the program.

For program course details and course descriptions, refer to the College Catalog or the following link: http://howardcc.smartcatalogiq.com/en/2021-2022/Catalog/Programs-by-Pathway/Health-Sciences-Pathway/Radiologic-X-Ray-Technology-AAS-Degree-Career.

Program Courses are offered in accordance with the College Academic Calendar. The current College Academic Calendar can be accessed at the following link: https://www.howardcc.edu/programs-courses/academics/academic-calendars/.

4 Program Faculty and Staff

Georgene Butler, PhD, RN

Dean, Health Sciences

gbutler@howardcc.edu

443-518 - 4414 (Office)

Assefa Fisseha, MSc. RT (R) (CT) (MR) (ARRT)

Chair

afisseha@howardcc.edu 443 518 - 4296

Joanne Niewood, M.Ed. RT (R) (CT) (ARRT)

Clinical Coordinator

jniewood@howardcc.edu 443 518 - 3324

Adebayo Olokodana, MSc. RT (R) (CT) (ARRT)

Faculty

aolokodana@howardcc.edu 443 518 - 3132

John Ansah AAS, RT (R) (ARRT)

Clinical Instructor

Alicia Philipp AAS, RT (R) (CT) (ARRT) Antoine Bui AAS, RT (R) (MR) (ARRT)

Quynh Schwab AAS, RT (R) (ARRT)

Laboratory Instructors

Division Office (HS 236)

Lauren Nitz, *Program Administrator* 443-518-4643 lnitz@howardcc.edu

Division Clinical Liaison office (HS 353 and 354)

Dwayne B Lewis, MS, R.T.T

Health Sciences Division, Lead Clinical Liaison Dlewis@Howardcc.edu

5 Program Expenses and Student Resources

5.1 Tuition

The Radiologic Technology Program at HCC follows the tuition and consolidation fee schedule as listed in the HCC Schedule of Classes. Tuition fee per credit hour varies based on legal residency. However, consolidation fee is assessed as a percentage of the in-county tuition rate, regardless of residency. Additional and current information regarding tuition, fees, and refund policies can be obtained by referring to College Catalog at https://www.howardcc.edu/admissions-aid/pay-for-college/

5.2 Books

The cost for books will vary by semester. Each course will have a required list of textbooks to purchase, which can be found in the college bookstore. Students are encouraged to buy in bundles as the program negotiate for lower cheaper bundle price and students can have access to additional online resources. There will be three bundles with approximate cost of \$1000. Contact the bookstore for information concerning book costs https://www.howardcc.edu/services-support/bookstore/

5.3 Transportation and Parking

Each student will be expected to travel to clinical sites in the Baltimore/Washington metropolitan area. All students are responsible for their own transportation to and from clinical sites. To ensure timely attendance, students will need to know the location, approximate travel time (with and without traffic), before the first day of clinical assignment.

Parking on the college campus is free. However, some clinical sites require low-cost parking fees (approximately \$10.00). Transportation and parking at off campus sites are the responsibility of the student.

5.4 Miscellaneous costs

Students are also responsible for additional costs such as ARRT certification exam registration fee, ARRT certification exam review seminar, and Clinical Management System fee. The current Clinical Management System used by the Program is called Trajecsys Report System. Current Pricing and other information may be found at https://www.trajecsys.com/.

The Radiologic Technology Program has partnered with CastleBranch, one of the top ten background check and compliance management companies in the nation, to provide you with a secure account to manage your time sensitive school and clinical requirements. New students will pay an initial fee of approximately \$99.00 for the combination package of the criminal background, urine drug screen, and medical compliance tracker. For the required annual recheck of the criminal background and urine drug screening, the fee is reduced to \$61.00. Details can be obtained from the Health Sciences Division, Clinical Liaison Team hsdcc@howardcc.edu.

5.5 Student Resources and Services

Students have access to college computers, library, cafeteria, and study rooms. Students can use college printers for free up to their maximum number of copies allowed per semester and pay per page basis for more pages than the limit. Some computer rooms may be reserved for training and/or examination purposes. Students are advised to check availability.

HCC has several Student Service provisions. The following is a list of services provided: Career Services, Childcare, Co-ops/Internships, Counseling, Disability Support, Learning Assistance Center, Library, Password Services, Adult Learners, Military & Veterans, Online Writing Lab, Student Support Services, Tutoring, and Wellness. Students are advised to refer to the HCC Catalog for further information. Any student who needs support and / or life enrichment can contact the aforementioned service providers for assistance https://www.howardcc.edu/services-support/

6 Academic standards

All students are expected to adhere to the policies, procedures and standards of conduct as determined by HCC. These policies are listed in several college documents including the HCC College Catalog http://howardcc.smartcatalogiq.com, and in the HCC Student Handbook https://www.howardcc.edu/student-life/student-handbook/

6.1 Standards of Ethics

The American Registry of Radiologic Technologists (ARRT) publishes a Standards of Ethics document that includes both a Code of Ethics and a Rules of Ethics component. Students are taught professional and ethical behaviors in accordance with the ARRT standards of Ethics and the American Society of Radiologic Technologists (ASRT) Practice Standards in the Patient Care sections of courses in the program curriculum.

Students in the program are expected to act in a professional and ethical manner as outlined by the ARRT Standards of Ethics and ASRT Practice Standards.

6.2 Academic Honesty

The following information is obtained from the HCC Academic Honesty Policy for RADT Program use. Academic honesty is critical at Howard Community College (HCC). Broadly, academic honesty means incorporating one's own thoughts and materials in all academic activities (e.g., assessments, papers, projects, lab reports). A violation of academic honesty involves misrepresentation, the submission of materials for evaluation that are not the student's own, or fulfillment of an academic exercise that does not result from individual effort or intellectual production. Examples of academic dishonesty include but are not limited to unauthorized use or copying of materials, unauthorized assistance with assignments, unauthorized collaboration, unauthorized use of devices or tools, unauthorized prior knowledge of the contents of assessment instruments such as exams, quizzes, or surveys, cheating on exams or quizzes, submitting fraudulent documents, and falsification or fabrication of information.

For full policy details and procedures concerning infractions of academic honesty and disciplinary actions, refer to the HCC's Academic Honesty Policy which may be accessed at the following link https://www.howardcc.edu/about-us/policies-procedures/chapter-10/10.02.01-Academic-Honesty.html.

Students are expected to adhere to Academic Division and Program Specific Policies reviewed during the first week enrolled in the Radiologic Technology Program.

6.3 Social Media and Networking

The program expects the student to use social media appropriately and with good judgment, always being conscious of whether a post will be helpful or potentially harmful. Good judgment also involves considering whether a post has embarrassing or promising potential or could positively or negatively affect a future opportunity. Students must not mention a clinical site by name (full or abbreviated), patient encounter or case, patient name or any identifying information, clinical instructor's name, and/or any other patient, staff or site related information.

6.4 Drug, Alcohol, and Smoking

HCC is a drug, alcohol, and smoke free campus. Drug and alcohol use and smoking on campus is prohibited. All students shall abide by the college policy as outlined in the HCC Student Handbook https://www.howardcc.edu/about-us/policies-procedures/chapter-63/63-11/.

All students shall abide by college policies concerning Stalking, Harassment, and Sexual Misconduct as outlined in the HCC Student Handbook. https://www.howardcc.edu/about-us/policies-procedures/chapter-63/63-01/63-01D.html

Skills Lab, and Clinical Attendance

Classroom, skills lab, and clinical attendance is key to the success of all courses and intended to maximize the student's potential to obtain required knowledge and skills. Students should attend all didactic classes to increase potential for success in the program.

Attendance policies for skills lab and clinical rotations are the same. Tardiness to and absence from skills lab and clinical can drastically affect student's performance in the program. A student must complete the minimum number of clinical rotation hours stated on each clinical course syllabus. A student is allowed to take a leave day for emergency or a valid reason, the day MUST be made-up by the final week or by banking extra hours during regular rotations in consultation with the clinical coordinator. Students cannot exceed 10 clinical hours per day to make up leave day/s. medical emergency and death in immediate family are examples of unanticipated valid reasons.

Students are expected to be on time and prepared for all classroom and clinical activities. **TARDINESS** is not acceptable, and it will likely affect the student's ability to meet the clinical course requirements. Tardiness and absenteeism impact the student's professional performance evaluation. The **grace period** for tardiness is 5 minutes. A student who arrives at a clinical site later than 5 minutes after the scheduled clinical start time is considered late. A student should not go to a clinical

site if he/she is going to arrive 1 hour later than the clinical start time. If a student goes to a clinical site, disregarding the above 1-hour limit, the clinical site will deny access. Students may use a leave day for such an occurrence. Students are required to inform their clinical site if they will be late or absent.

Rules concerning lateness and clock in/out occurrences are as follows:

- 1. Students are excused for <u>one clock in or out infraction</u> and <u>one lateness</u> <u>occurrence</u> before point deductions are taken on the semester Professional Performance Evaluation.
- 2. Point deductions on the Professional Performance Evaluation may result in a failing grade for the evaluation and potentially the course.
- 3. Time missed time due to lateness may <u>not be eligible for makeup</u> and <u>cannot</u> be made up at the end time the assigned day.

EXCESSIVE ABSENTEEISM - attending less than the minimum number of clinical hours stated on a course syllabus during a semester will result in course failure if the hours are not made up during the final exam week. However, if a student misses clinical rotation hours for serious medical condition, childbirth, or an unanticipated serious event with proper documentation, he/she might be allowed to make up the hours, if there is a clinical site for makeup. The program will evaluate the practicality of making up missed clinical hours for a prolonged illness/injury and assigning a student to make up missed clinical hours.

If a **CLINICAL SITE REQUESTS** a student to leave the department and/or site during an assigned rotation, **due to no fault of their own**, the missed clinical hours must be documented on attendance sheet, but it will not be held against the student. However, if the **CLINICAL SITE** or HCC clinical instructor requests a student to leave the department and/or site during an assigned rotation, **due to issues such as disruptive behavior, concern for patient safety etc.**, the student will be held accountable. If a clinical site requests that a student not return due to behavioral reasons, the student may not be reassigned, and therefore, the student may not be able to progress in the program.

PLANNED ABSENCE - A student is required to inform his/her clinical site, **HCC Clinical Coordinator**, and **Program Chair** via e-mail in advance to request an absence day. **If the absence is due to an emergency**, the student must contact the clinical site representative, Clinical Coordinator, and Program Chair by phone (leave voice message) and/or email at their earliest convenience. The student must provide proof of the emergency such as a doctor's note indicating that the student was treated for emergency illness. The student should also provide documentation from the physician releasing him/her back to clinical duty without any limitations.

at the assigned clinical site, in the work area using a site computer. CLOCKING-IN/CLOCKING-OUT from any other location is not permitted and is considered document falsification. Students will use their personal cell phone to clock in/out ONLY when assigned to Howard County General Hospital or when designated by the Clinical Coordinator. Students are permitted to clock in within 15 minutes before the scheduled clinical start time and clock out within 15 minutes after the scheduled clinical end time. A clock out within the 15 minutes after the scheduled end time is ONLY permitted to complete an exam currently being performed.

LEAVING CLINICAL SITE EARLY –Students cannot leave the clinical site early or request to leave early, for any reason. Only the Imaging Director or Supervisor of a facility can dismiss students for safety or emergency reasons. In such cases, the student must notify HCC Clinical Coordinator and Program Chair via email. If a student leaves clinical site without permission, disregarding the above rule and / or fails to notify the Program he/she will be considered absent. Students are prohibited from leaving their assigned area for any reason.

Clinical rotations are assigned by the Program Chair and Clinical Coordinator. Students cannot change or volunteer to change their clinical site under any circumstances. If a change in the student's assignment is necessary, it will be done only by the Program.

6.5 Bereavement Policy

Bereavement leave is not earned time and will be granted only if needed. Documentation of the death (e.g., death certificate, obituary, documentation from funeral home, etc.) may be required.

The amount of bereavement leave granted is as follows:

- 1. Upon the death of a father, mother, spouse, domestic partner, son, daughter, sister, brother, or legal guardian, the maximum bereavement leave time is 40 hours.
- 2. Upon the death of an uncle, aunt, grandparent, grandchild, niece, nephew, father-in-law, mother in-law, brother-in-law, sister-in-law, son-in-law, and daughter-in-law, the maximum bereavement time is 8 hours.

6.6 Leave of Absence Policy

The Radiologic Technology Program may authorize and grant a Leave of Absence for up to 4 weeks of leave per rolling 12-month period for health reasons with valid documentation. The student may be required to demonstrate current knowledge prior to resuming coursework.

6.7 Classroom and Clinical conduct

Students are expected to be respectful to their classmates, college community, clinical staff, and instructors always.

Eating and drinking in classrooms and clinical patient care areas are prohibited. All personal cell phones and electronic devices must be turned off while in the classroom and clinical sites.

A student may be dismissed from a classroom or a clinical training site if the student is exhibiting behaviors of substance abuse or unprofessional behavior.

If an incident of misconduct does occur, the faculty or the Program Chair will immediately investigate the incident. The student has the right to due process. If the student is found to be at fault, the student will be considered absent for the day/s missed.

6.8 Falsifying Clinical Attendance or Other Documents

Any student found falsifying clinical attendance, competency, or any other documents may be dismissed from the Program and he / she may be ineligible for readmission. Any student or technologist who collaborates in such act, especially falsifying attendance, and competency, will be considered equally guilty. The accomplice student may be dismissed from the Program and he / she may be ineligible for readmission. The technologist/s involved will be reported to the imaging director/manager of the facility.

Students cannot refuse to sign any required school related and / or disciplinary document. Signing a document does not imply automatic agreement. Students can submit a written disagreement letter to the Program Chair, within 3 business days after the singing date if they do not agree with the contents or characterization of a situation. A student will be suspended from class and clinical for refusing to sign any required school related and / or disciplinary document. Making up any missed exams and/or clinical hours until the student is cleared to return to class or clinical is not allowed.

6.9 Use of Electronic Devices

Cellular phones and other electronic devices must not to be used during any clinical rotation under any circumstances, unless approved by the Program and the site for Clinical Management System clinical tracking purposes only. Clinical site computers

and other clinical site electronic devices must be used strictly for site related clinical activities. The only exception is the use of site computers to clock in/out documenting attendance. For emergency purposes, the student may use the facility telephone with permission.

6.10 *Grading*

Student grades in the HCC RADT Program are governed by both college and program grading policies and are based on performance. A student can earn a "W", an "I", or a "NA" grade based on attendance in some extraordinary situations such as illness. For detailed college grading information, refer to HCC Student Handbook.

RADT students are evaluated on a regular basis to assess comprehension of didactic concepts, clinical skills, and ethical and professional behaviors. The program uses the following letter grading scale for didactic and clinical courses:

$$100 - 90 = A$$
, $89.9 - 80 = B$, $79.9 - 75 = C$, $74.9 - 60 = D$, and $< 59.9 = F$.

Students must receive a "C" grade or better to progress in the program. If a student receives a "D", "F", or a "W" grade for any RADT course, the student is not eligible to progress in the program. The student may apply for readmission to the program to join the next cohort.

6.11 Admissions policy

6.11.1 Standard admission to HCC credit courses

Howard Community College maintains an open-door policy of admission. Prospective students who are interested in taking classes at the college can be admitted on a space availability basis.

6.11.2 Admission to Radiologic Technology Program

Detailed radiologic technology program admissions information may be found at http://www.howardcc.edu/admissions-aid/apply-for-admission/alliedhealth/RadTech.html

6.12 Withdrawal, Dismissal, and Readmission

Any student who earned a "D" or "F" grade for any of RADT courses will not be allowed to progress in the program. Students who do not progress in accordance with the Radiologic Technology Program course sequence may choose to withdraw from the program. Students may be dismissed for inappropriate behavior and /or at-risk behaviors.

Readmission to the Radiologic Technology Program is neither automatic nor guaranteed but based on seat availability. To be considered for readmission, students must apply through the Office of Admission and Advising. A student is ineligible for readmission to the Radiology Program if his/her prior withdrawal/dismissal was due to at-risk behavior, conduct-related issues, or he/she was banned from a clinical site. A student who withdrew for health-related issues is required to obtain health clearance from a physician to be considered for readmission. If clearance cannot be obtained, the student is ineligible for readmission.

Steps for Readmission:

- 1. Students applying for readmission to the program should review their coursework while waiting for readmission.
- 2. Readmission eligibility is NOT determined based on the Student Handbook that was valid during the student's dismissal but based on the Student Handbook that is valid for the period that the student is seeking readmission.
- 3. Completed readmission application must be submitted to the office of Admissions and Advising by the following deadlines: May 15 for Fall readmission, September 15 for Spring readmission, and February 15 for summer readmission.
- 4. A student who earned an unsuccessful grade for any course in any semester must take a readmission theory examination for the course or courses failed or withdrawn from and must score a grade of 70 or above.
- 5. Readmission exams are administered three times a year: June 15– June 20 for Fall readmission, October 1- October 10 for Spring readmission, and March 1 March 10 for summer readmission.
- 6. A Prospective student should schedule the readmission exam with the Program Chair two weeks prior to the start of the examination window date.
- 7. If a student earns a passing score on the readmission exam, he / she will be readmitted to the program if there is a clinical seat.
- 8. The prospective student must meet ALL clinical clearance requirements prior to clinical placement assignment.
- 9. Clinical competencies earned during successful clinical courses will be credited upon readmission. Clinical competencies acquired during the unsuccessful or failed course will not be credited upon readmission.
- 10. A student cannot be readmitted during a semester he/she completed successfully.
- 11. A student cannot repeat the same RADT course more than once.

6.13 Graduation Requirements

Requirements for graduation in the Associate of Applied Science (AAS) in Radiography program

- Complete all American Registry of Radiologic Technologists (ARRT) didactic and clinical requirements. The current requirements can be found using the following link https://assets-us-01.kc-usercontent.com/406ac8c6-58e8-00b3-e3c1-0c312965deb2/68688f6b-d625-4fce-be07-b9b8a81b7d10/RAD_CC_2022.pdf.
- Fulfill the course requirements of the Associate of Applied Science in Radiography curriculum
 - A total of 69 credit hours attaining a 2.0 average with a grade of "B" in Anatomy and Physiology I (BIOL 203) and "C" or above in each required radiography and general education courses.
 - General education core 20 semester hours.
 - o Required courses related to major 49 credit hours.
- Complete required courses related to major (49 semester hours) at the College.
- Comply with program and clinical specific requirements such as training, health, and background check.
- No outstanding tuition or fees owed to the college at time of graduation
- Return of all school property including, ID badges, radiation badges and holders, etc.
- Upon successful completion of all requirements, graduates from the program will receive an Associate of Applied Science (AAS) degree in Radiologic Technology from Howard Community College.
- Graduates are eligible to apply for the National Certifying Examination in Radiography, administered by the ARRT and apply for Maryland Radiography license from the Board of Physicians.

6.14 Grievance

The grievance policy is adopted from the current HCC Student Handbook. RADT students must adhere to the steps to resolve any academic or nonacademic complaints.

6.14.1 Academic Complaints

To maintain the integrity of the academic environment and to ensure the rights of students in such matters, HCC's administrative policies and procedures provide a framework to resolve student complaints of an academic nature. An academic complaint is defined as an issue related to classroom instruction or a grade dispute in which the student believes a grade was assigned in an arbitrary or inconsistent

manner. A student who has an academic complaint, including a specific academic complaint involving a faculty member, that remains unresolved through informal means, may enter a formal process of problem resolution. The student academic complaint procedures and the appropriate form may be obtained from the division offices. A student who wants to initiate a formal academic complaint must submit an academic complaint form no later than the end of the seventh week of the next major term. All written correspondence concerning this matter will be sent to the student using their HCC email account.

- 1. The student must discuss the problem with the instructor prior to beginning the formal complaint process. Many times, misunderstandings can be resolved by honest, open dialogue.
- 2. If the issue is not resolved after discussing it with the instructor, the student may pursue the matter further by submitting a formal written complaint. The student should contact the division office to schedule an appointment with the appropriate designated division representative. A meeting will be scheduled between the division representative and the student to discuss the problem and outline the formal complaint process. The student may then file a formal, written complaint that must include:
 - a written description of the academic issues in dispute.
 - any supporting evidence.
 - the specific academic complaint form with the student and faculty signatures or record of the electronic communications.

The written complaint must be submitted by the student to the division representative no later than the seventh week of the next full semester. Incomplete submissions will not be reviewed. This decision will be communicated to the student in a formal correspondence, and the faculty member and division leader will be notified of the decision.

3. If the student wishes to appeal the division resolution, the student must notify the division representative within one week of receiving the written resolution from the division or meeting with the division representative regarding the resolution, whichever occurred last. The student's written complaint, the instructor's written response, and the division representative's written recommendation will be forwarded to the vice president of academic affairs. The student has the right to meet with the vice president of academic affairs but is not required to do so. The student who wishes to have a meeting must contact the vice president's office directly within two weeks of notifying the division representative of their intention to appeal, to schedule the meeting. The decision

of the vice president of academic affairs is final and will be conveyed in writing to the student.

6.14.2 Non-Academic Complaint Procedures

Procedures for resolution of student concerns involving student services are as follows:

- 1. Students should make an appointment with the appropriate administrator or staff member to discuss the problem (refer to the section titled "Who Do I See?" in the HCC Student Handbook).
- 2. If the student cannot resolve his/ her problem by meeting with the administrator or staff person, the student may make an appointment with the staff member's immediate supervisor.
- 3. If the concern is not resolved at the administrator or supervisor level, the student may make an appointment to see the vice president of student services or designee.
- 4. The vice president of student service's decision is final.

Procedures for resolution of student concerns involving student clinical experiences/rotations are as follows:

- 1. Students should email or meet with the Clinical Coordinator to discuss the problem or concern.
- 2. The Clinical Coordinator will investigate and address the concern with the Site Clinical Preceptor and/or Department Supervisor/Manager as appropriate to the situation.
- 3. If the student does not feel his/her concern has been resolved by meeting with the Clinical Coordinator, the student may make an appointment with the Program Chair for resolution.
- 4. If the student cannot resolve the problem during a meeting with the Program Chair, the student may contact the division office to schedule an appointment to see the Dean. Prior to scheduling the appointment, the student must submit a written description (form provided at the back of handbook) of the problem, the resolution the student is requesting, and the signature of the Clinical Coordinator to confirm that the initial required meeting has taken place. If the concern is not resolved at the division level, the student's written complaint, the Clinical Coordinator's written response, the Program Chair's written response, and the Dean's recommendation will be forwarded to the vice president of academic affairs. At this stage in the complaint process, the student has the right to meet with the Vice President of Academic Affairs (VPAA), but the student is not required to do so. That appointment must be

made within two weeks of the meeting with the Dean. If the student has not made contact within two weeks, the student has waived the right to the meeting. After that two-week period, the VPAA will make a judgment on the case.

5. The decision of the VPAA is final. This decision will be communicated to the student in a formal correspondence.

7 Awards and Honor Societies

7.1 HS Division award

Every year, the Health Sciences Division honors one student who has excelled during their time in one of HCC programs. The student is selected for their unique academic achievement, community service, and leadership quality. Since 2010, four students from the RADT program were honored with this award. Some of the requirements considered during the selection process are:

- 1. Strong academic achievement.
- 2. Membership in professional organizations such as ASRT and MSRT.
- Participation in HCC or other community service such as food drives, RADT info sessions.
- 4. Leadership such as class president, vice president, student mentor.

7.2 Lambda Nu

Lambda Nu (LN) is a national honor society for the radiologic and imaging sciences. Its objectives are to:

- 1. Foster academic scholarship at the highest academic levels
- 2. Promote research and investigation in the radiologic and imaging sciences
- 3. Recognize exemplary scholarship

Howard Community College Radiologic Technology Program is the MARYLAND CHI Lambda Nu chapter among the 241 programs in 46 states. Student membership to Lambda Nu is by invitation from the local chapter in accordance with the chapter's Bylaws. Once eligibility is verified by the chapter director, applications may be completed and sent to the home office of Lambda Nu.

7.3 Alpha Eta Honor Society Selection Requirements

The following shall be deemed eligible for election by the chapter to active membership to the society:

1. Associate: those undergraduate students working towards an associate or a baccalaureate degree who have complied with the following conditions.

- 2. They shall be enrolled in an allied health program leading to an associate or a baccalaureate degree and will be enrolled in their last year in residence.
- 3. They shall have maintained an overall grade point average of 3.5 or better (out of 4.0) while enrolled in the allied health program on this campus.
- 4. They shall have shown capacity for leadership and achievement in their chosen allied health field.
- 5. They shall have been recommended by active members through a nominating process in each department or program and approved by the Division Chair of the Health Sciences.
- 6. Membership shall not exceed twenty per cent of the student population of any department or program.
- 7. Students who are members of professional associations such as ASRT and MSRT have better chance of nominated to the Alpha Eta Honor Society.

8 Skills Laboratory

The skills laboratory serves to connect the learned didactic content with the clinical application. Students will practice and reinforce several areas of required objectives, including, but not limited to:

- Patient care and safety
- Communication, history taking, and document review
- Radiographic anatomy and pathology
- Radiographic image analysis
- Patient positioning
- Equipment manipulation and utilization
- Radiographic technique selection

Practicing in energized skills laboratory requires that a registered radiologic technologist be present, at all times, with a student. Students are prohibited from practicing in the energized skills lab without the supervision of a registered radiologic technologist. Students can practice positioning without energizing the x-ray machine if they have **indirect supervision** from a registered radiologic technologist.

All procedures courses have mandatory didactic and skills lab practice. In addition, optional open lab sessions are available. Additional skills lab practice can be arranged with the faculty or skills lab instructor. Students are required to attend all scheduled skills lab sessions prior to obtaining laboratory competencies. Performing skills lab competencies is like performing clinical competencies. A student who does not complete the required number of lab competencies for a particular course will fail the associated procedures course. Moreover, a student will not be permitted to obtain

clinical competencies until the simulation requirements have been met. Grades for skills laboratory performance are incorporated into the radiographic procedures course grade. Uniforms and a radiation monitoring badge must always be worn when practicing and performing simulated competencies. Attendance is mandatory and the attendance policy is the same as clinical attendance policy. If a student misses a skills lab session for any reason, it is the student's responsibility to arrange a makeup practice session before the next class.

Students, under direct supervision of a registered technologist, are required to complete a total of 57 competencies with a minimum grade of 85% on all basic projections demonstrated in the lab. The procedure designed to remediate student performance when a skills lab or clinical exam competency is attempted and unsuccessfully completed is reviewed in the RADT 108 Introduction to Clinical Radiography Course.

The breakdown for skills lab competencies is as follows: RADT 116 - a minimum of 23 skills lab simulation competencies, and RADT 126 - a minimum of 34 skills lab simulation competencies.

9 Clinical Rotation

9.1 Clinical On-boarding Documents

9.1.1 Health Requirements

Prior to the beginning of the first semester of the program, students are required to submit Health Forms, which are completed in conjunction with their Health Care Provider. These forms document that the student is physically and psychologically able to meet the requirements of the Radiologic Technology Program. These forms are considered clinical onboarding documents and must be maintained. Health requirements, due dates and specific forms are available at the following link:

http://www.howardcc.edu/programs-courses/academics/academicdivisions/health-sciences/resources/index.html

All requirements are to be submitted to/through CastleBranch Health Compliance Tracker for review/approval. Please note to create an account please go to: https://portal.castlebranch.com/hh18

Students must fulfill all Clinical On-boarding Documents in accordance with the designated deadlines determined by the Division Clinical Liaison.

Health forms, including CPR, must be submitted, and the student must be clinically cleared before the student can be scheduled to attend a clinical site. Clinical Clearance is obtained when:

- 1. All required documents are submitted on time.
- 2. Health care provider and/or tests indicate that there are no restrictions and/or unacceptable lab values.

It is the student's responsibility to ensure that health requirements are kept up to date, in accordance with clinical clearance policies. If any clinical onboarding document expires during a term, it must be updated in accordance with published deadline dates. Dates are available on the HCC Health Sciences Division website. If a student fails to keep clinical documents and requirements up to date, the student will not be permitted to attend clinical rotations which may jeopardize successful completion of clinical course requirements.

Background Check, Vaccines, and CPR

In addition to the health-related documents listed above, the Program requires students to be in compliance with the following clinical onboarding documents:

- 1. Criminal Background Check Annually.
- 2. Urine Drug Screen Annually (10-Panel).

- 3. CPR
- 4. Seasonal Flu and COVID-19 Vaccines

Criminal Background Check and Drug screening are clinical requirements. If a student is prohibited from attending a clinical site due to an unsatisfactory criminal background check and/or positive drug results, the Program will not reassign the student to any other clinical site. Thus, the student will not be permitted to continue in the Program.

9.1.2 Health and Liability Insurance

Howard Community College does not provide or sponsor health insurance to the students. If a student sustains any injury while on campus or in the clinical setting, students should utilize their own health insurance or pay out of pocket to cover the cost of treatment and/or follow-up care. Students are strongly encouraged to obtain their own health care insurance. The Office of Student Life, Admissions and the Wellness Center maintain Health Insurance information packets for students.

Howard Community College provides liability insurance coverage for students while they are attending approved clinical activities arranged by the Program. Liability insurance provides for legal expenses, according to the limits specified by the coverage. Students are eligible for liability coverage only if they were acting within the approved scope of practice and were being appropriately supervised at the time the incident occurred.

NOTE: Liability insurance is not health insurance.

STANDARD PHYSICAL REQUIREMENTS FOR CLINICAL ROTATIONS IN RADIOLOGIC TECHNOLOGY

The following are the Standard Physical Requirements for working in the clinical environment as a student in the Radiologic Technology Program. These requirements were established as a result of a survey of clinical affiliates that provide training to RADT students. If you cannot meet these requirements, please contact the Program Chair to discuss the matter.

Lift While Standing -Light to Moderate - Less than 50 pounds - Frequent

Lift While Sitting -Light - Under 25 pounds - Frequent

Lift With Assistance -Heavy - Over 50 pounds (Patient Transfer, etc.) -

Occasionally/Frequent

Pushing -Heavy - Over 50 pounds - Frequent Pulling -Heavy - Over 50 pounds - Frequent

Reaching -(Full Extension - Elbow Flexion) at shoulder level -

Occasional/Frequent

Reaching - (Full Extension - Elbow Flexion) above shoulder level -

Occasional/Frequent

Standing for extended periods - Frequent

Standing for extended periods with radiation protective device - Frequent

Sitting for prolonged periods - Frequent

Walking - (Moderate distances within clinical

environment) - Frequent

Carrying - Light to Moderate - Less than 50 pounds - Occasional

Bending -Occasional/FrequentStooping -Occasional/ FrequentKneeling -Occasional/ Frequent

Turning - Frequent

Hand Manipulation - (Hand controls, simple grasping, power grasping, fine

manipulation) - Frequent

Foot Controls - Frequent

Visual Requirements- Ability to observe alarms, monitors, indicators, patients and the public. Ability to recognize and respond to safety issues.

Auditory Requirements -Ability to hear and understand orders from a physician or supervising technologist. Ability to hear warning buzzers, safety alarms and responds appropriately.

9.2 Change in Health Status Policy

Any student experiencing a change in health status (any illness or injury) while enrolled in the program will be required to submit a written statement from his/her healthcare provider as to his/her ability to perform all expected functions fully, safely, and without jeopardizing the health and/or well-being of the student or others. Documentation must be provided prior to re-admittance into the didactic and/or clinical setting.

9.3 Education Requirements for ARRT Certification

The American Registry of Radiologic Technologists (ARRT) tests and certifies qualified candidates who have met the didactic and clinical requirements within the profession. ARRT is the world's largest credentialing organization that seeks to ensure high quality patient care in radiologic technology.

ARRT requires Mandatory and Elective clinical competency exams that MUST be completed as Education Requirements for ARRT Certification Effective January 2022. The following is a list of those requirements:

- Ten (10) mandatory general patient care activities.
- Thirty-Six (36) mandatory imaging procedures.

- Fifteen (15) elective imaging procedures selected from a list of 35 procedures.
 - One of the 15 elective imaging procedures must be selected from the head section: and
 - o Two of the 15 elective imaging procedures must be selected from the fluoroscopy studies section; For more information students are encouraged to visit the following ARRT website: www.arrt.org
 - One patient may be used to document more than one competency. However, each individual procedure may be used for only one competency (e.g., a portable femur can only be used for a portable extremity or a femur but not both).

The program systematically rotates students to different clinical settings. It is the student's responsibility to complete all mandatory and required elective competencies in the course of two years. Students can perform up to two simulated competencies if they come up short at the end of the program.

9.4 Uniform

For clinical practice, procedures class and skills lab practice, students MUST wear a uniform. The vendor's name is Landau. Students must order uniforms through the HCC bookstore. The following is information about the specifications of the uniform:

- Navy Blue V-neck scrub top embroidered with HCC logo
- Navy Blue Pant
- Navy Blue Scrub Jacket (optional)
- White short-sleeve crew neck shirt
- White long sleeve crew neck shirt (optional)
- White or black socks
- White or black tennis shoes (reinforced toe, no soft material)
- Radiation badge
- Technique book (spiral notebook)
- Current Howard Community College Student ID
- Assigned numbered R/L markers
- Site ID badges, if issued

Students may not wear facial jewelry or artificial nails. Additionally, all tattoos and body piercings must be covered, and not visible. All the above uniform items are required each day for clinical practice. If a student lacks one of the above, he/she will be dismissed for the day. The dismissal will be counted as an absence, regardless of the reason or time of day.

The uniform must be clean and ironed. If any portion of the uniform is unserviceable (i.e., wear/tear, dingy, etc.) the student must replace the item promptly, else the student will be dismissed for the day. The dismissal will be counted as a day of absence, regardless of the reason or time of day.

Nail-polish and artificial nails **ARE NOT** permitted at a clinical site. Fingernails must be clean and kept short. Perfume/Cologne should be used in moderation to maintain professionalism. If there is a complaint about perfume/cologne usage, the student must immediately refrain from its use during clinical rotations. Infection control must be maintained regarding hair, beards and mustaches, which must remain in compliance with the assigned clinical site's policies. If hair is longer than shoulderlength, it must be pinned in a neat fashion above the shoulders. Visible body piercings are <u>not</u> permitted, except for two small piercings per ear in the *lower* earlobe. Students must maintain a "professional and well-groomed appearance and good personal and oral hygiene." Students must also adhere to the assigned site's departmental policies.

9.5 Clinical Evaluation and Grading

The clinical experience is sequenced to correlate with didactic objectives of clinical education. Clinical rotations will provide students with practical experience and exposure to the responsibilities of a radiographer in the following areas:

- Patient care
- Professional behavior
- Radiation protection
- Radiographic procedures
- Equipment manipulation and setting technical factors

The grading criteria for clinical courses are the same as that of didactic courses.

<u>Clinical Competencies</u> require a grade of ≥ 85 %, based on the following criteria:

- a. Knowledge of procedure and communication
- b. Technical skills and equipment manipulation
- c. Radiation protection and infection control
- d. Critical thinking and image analysis

Exam Competency Failure Procedure

This procedure is designed to remediate student performance when a clinical exam competency is attempted, and the student achieves a score of less than 85%. When a student achieves less than the required score, the Clinical Coordinator will evaluate the need for, and type of remediation required to be eligible for successive attempts to achieve competency. The procedure involves three components: Student Counseling and Advisement, Skills Lab Remediation, and Reattempt of an Exam Competency. Full details are provided during the initial clinical course RADT 108, Introduction to Clinical Radiography.

Students are assessed by faculty and staff clinical instructors during each semester. All registered technologists can provide clinical assistance and instruction to students; however, clinical competencies must be completed by a registered radiographer with at least 2 years of experience. Unless specifically designated by the Clinical Coordinator, PRN technologists, who are not fully aware of Program policies, are not permitted to perform clinical competencies.

9.6 Professional Conduct

Students are responsible for conducting themselves in a manner consistent with the professional organizations' Codes of Conduct (ARRT and ASRT) and the HCC's Code of Conduct, its supporting policies, as well as state and federal laws and regulations. Students should always show professional courtesy and respect during clinical interactions.

9.7 Conduct Violations

The Program upholds industry standards regarding education and professionalism. HCC Faculty and/or clinical staff have the right and responsibility to require a student to leave the clinical setting if the student's behavior is considered a breach of professional conduct. A breach of professional conduct includes the disruption of the physical and/or psychological well-being of patients, faculty, students, or clinical staff. Under these conditions, a student will be removed from a clinical site. If a student acts in any of the following ways, the student may be immediately dismissed from the Program and he /she is not eligible for readmission.

The following is a list of behavioral activities that are considered a breach of professional conduct, but it is not all encompassing:

- 1. Mistreatment of patients in any manner
- 2. Medical negligence such as leaving patients unattended while undergoing diagnostic procedures
- 3. Falsifying attendance, competency form or other documents
- 4. Habitual absence and/or lateness and failure to notify the Clinical Instructor and Program Chair of an absence or lateness prior to the assigned starting time
- 5. Loitering on hospital premises outside the *Radiology Department* or other unauthorized places and /or within Radiology Department beyond assigned hours

- 6. Refusal to sign Program or College documents
- 7. Exhibiting insubordination (refusal to follow instruction from designated supervisors), immoral conduct, or indecency
- 8. Willfully damaging, destroying, or misusing institutional property.
- 9. Stealing or be in unauthorized possession of hospital or another person's personal property
- 10. Touching a patient inappropriately
- 11. Touching a staff, student and/or faculty member inappropriately
- 12. Sexual Harassment
- 13. Deliberately causing danger in the workplace or campus activities
- 14. Breach of patient / staff confidentiality
- 15. Create or contribute to unsanitary conditions in hospitals or other premises.
- Intimidate or coerce another student or employee through physical or verbal threats
- 17. Be in possession of a weapon of any kind while on hospital or college premises
- 18. Exhibit signs and symptoms of drug and/or alcohol use, or having possession of drugs and/or alcohol on hospital premises
- 19. Failure to report any accident or injury involving student, patients, other hospital employees, or visitors
- 20. Leave the clinical area early without prior permission of the Clinical Instructor
- 21. Sleep or loiter during clinical time
- 22. Accept or coerce gifts from patients
- 23. Misuse of site ID badge

Students may be required to submit alcohol and drug screenings, if at any time, signs and symptoms of possible use are observed. The student is responsible for all costs of any lab tests or screenings which are performed.

9.8 At-Risk Behaviors

During a student's progressive learning experience, the Program assesses the student's pattern of obtaining and applying previously learned concepts and skills. When the student's learning *pattern* is not consistent, after being assessed and evaluated as competent by the Program in specific skills, the student's behavior is considered At-Risk.

More than three (3) separate and/or repeat incidences of At-risk behaviors in a term or more than six (6) separate and/or repeat incidences of At-risk behaviors during the entire program will warrant immediate termination from the Program. A term is defined as the length of time designated for the completion of a sequenced course (class).

At-Risk Behaviors includes, but is not limited to:

- 1. Not providing adequate radiation protection
- 2. Non-use of Right and Left markers, repeatedly
- 3. Misuse of Right and Left markers (incorrect side of body)
- 4. Double exposure of images
- 5. Positioning patients incorrectly for exams previously learned
- 6. Incorrect placement of the image receptor, such that an image would not be produced
- 7. Improper uniform attire
- 8. Unauthorized use of electronic devices
- 9. Failure to maintain medical and surgical asepsis and implement proper infection control
- 10. Demonstrable lack of progress in learning or performing radiologic exams
- 11. Failure to maintain an environment conducive to patient and personal safety
- 12. Failure to follow the JRCERT's and Program's repeat, direct or indirect supervision policies
- 13. Insubordination of any kind
- 14. Smoking in undesignated areas of the *Radiology Department* or other undesignated areas of the hospital
- 15. Disobeying other regulations concerning fire, safety, parking, and visiting.
- 16. Engaging in excessive talking, laughing, and other disturbances not appropriate in the hallway, around patients, or on hospital premises

At Risk behavior procedures

- 1. At Risk behavior(s) will be documented on the Faculty -Student Consultation Form.
- 2. A student /instructor conference will be held.
- 3. A copy of the Student Conference Form will be given to the student, and Program faculty will maintain the original copy on the student's file.

Students are expected to always conduct themselves in a professional manner, whether in the clinical laboratory or clinical agency. Students who are asked to leave a clinical experience or clinical laboratory due to violations of safety, professionalism, and/or college/program code of conduct, will not be placed in another clinical site or laboratory, pending investigation and review. This may result in an inability to progress and/or complete course/program. Students have the right to appeal and due process. Up on investigation, the Program will attempt to place the student to another clinical site one additional time, if the student was not at fault and provided:

- 1. There is an available seat to place the student.
- 2. The student has not obtained 3 At-Risk behavior notifications for that term or 6 At-Risk behavior notifications for program duration.
- 3. The site change does not affect another student's scheduled objectives and learning.
- 4. The request for removal is not related to drug or alcohol use.
- 5. The request for removal is not due to conduct or At-Risk Behaviors that may jeopardize patient safety.

9.9 *Incident reporting / Overexposure*

Following a clinical incident of patient or student injury or abnormal radiation exposure, the incident must be reported immediately to Site Clinical Instructor, Department Manager, Program Director, and Clinical Coordinator. The HCC Incident Report Form must be completed by the site clinical instructor and returned to the HCC Clinical Coordinator or Program Director. The clinical site may require additional documentation. In addition, any incident that the student or staff considers to be inappropriate or unethical must be reported immediately to the Departmental Manager, Clinical Coordinator, and Program Chair.

9.10 Clinical Administration and Clinical Data Tracking

HCC student progress in a clinical setting develops from an observer to a competent radiographer who can perform radiographic procedures independently. In preparing the student to be a competent entry level radiographer, the following format is employed:

- Skills Lab practice and competency
- Clinical observation
- Pre-clinical competency practice
- Clinical competency
- Clinical and Skills Lab reinforcement (additional) competency
- Post competency practice for proficiency

Required Procedural Steps for Competency Achievement

Lab Requirement

Students must practice and successfully perform an Exam Competency in the Skills Lab prior to performing steps 3 and 4 (outlined below) in a health care setting. Steps 1 and 2 may be performed in the health care setting before a Skills Lab Competency is achieved.

Additionally, students must practice and successfully complete Patient Care Competency Evaluations in the laboratory setting including vital signs assessment, patient transfer techniques, sterile-aseptic technique, venipuncture, and O2/Suction Equipment/Administration.

Health Care Setting

Documenting competency in a health care setting has four levels, each of which is completed chronologically and documented. However, Step 2 - Assisting the Technologist (Assist with much help) may be omitted if the student feels confident and ready to move to step 3 - Performing Exam for Determination of Competency Readiness (Assist for Competency).

The four levels include:

- 1. Exam Observation
- 2. Assisting the Technologist (Assist with much help)
- 3. Performing Exam for Determination of Competency Readiness (Assist for Competency)
- 4. Competency Performance Evaluation

Level 1: Exam Observation (Observe) is defined as no direct involvement with equipment manipulation, technique setting, or positioning. Students can earn observe credit at any time during the program.

Required Documentation: Clinical Management System only

Level 2: Assisting the Technologist (Assist with much help) is defined as minimal involvement with equipment manipulation, technique-setting, and positioning. This level follows Exam Observation. Students may set technical factors provided by the technologist and move the x-ray tube and IR receptor into position at this level. The student may assist the technologist to get the patient into position, but independent positioning of the patient may only be performed after content coverage in class/skills lab.

Required Documentation: Clinical Management System only

Level 3: Performing Exam for Evaluation of Competency Readiness (Assist for **Competency**) is defined as direct involvement with equipment manipulation, technique-setting and positioning. The student will perform the exam with minimal assistance by the technologist to determine readiness for a Competency Evaluation. Student markers must be used. This level follows Exam Observation, Assisting the Technologist (optional), and a Skills Lab Competency Evaluation.

A student can only earn "assist for competency" credit after the didactic and skills lab portion of a body part is covered at HCC and the student documented competency at the skills lab.

Required Documentation: Clinical Management System and Hard Copy

Level 4: Competency Performance Evaluation (Perform Competency) is defined as independent student performance of a radiographic exam including equipment manipulation, technique-setting, and positioning of the patient. This level follows all prior levels. The technologist or clinical instructor will complete an evaluation of the student's performance at this level.

Note: Some exams are considered exempt from the standard procedural steps for competency achievement. Students are exempted from documenting Step 3 -Performing Exam for Determination of Competency Readiness (Assist for Competency) for the following exams: all repeat competencies, sternum, skull and facial bone exams, upper GI, barium enema, cross table spine, and cross table hip examinations.

In addition, if a student has completed a cervical spine competency, she/he does not need to observe or assist prior to completing a soft tissue neck competency. Similarly, if a student has achieved competence for any decubitus examination, she/he does not need to observe or assist prior to completing other decubitus competencies.

As the student achieves competency in radiographic studies, he/she is allowed to perform with increased independence and indirect supervision, thus promoting the development of self-confidence in exam performance. Ultimately, the result is a graduate who possesses competency as entry level radiographer.

Criteria for Completion of Competency Evaluations - A guide for performance of a Competency Evaluation is available in the Clinical Management System Report System.

Clinical Binder and Clinical Management System Tracking

The Clinical Management System will electronically profile the student's entire clinical experience. All clinical experiences must be tracked via the Clinical Management System. Students should also organize necessary documents in a clinical binder that they should always carry to their clinical site. The following are tasks that must be tracked and documented via Clinical Management System and/or hard copy for program credit:

- 1. Attendance (Clock in/out), (Clinical Management System and hard copy if electronic clock in/out is not feasible)
- 2. Objective forms, (Clinical Management System only) It is a student responsibility to request a Site or HCC CI to complete all **Objective forms** in **Clinical Management System** within two weeks of their assignment to a new clinical site.
- 3. Exam Observations, (Clinical Management System only)
- 4. Assisting the Technologist (Assist with much help), (Clinical Management System only)
- 5. Daily Clinical Log Sheet
 - a. Performing Exam for Evaluation of Competency Readiness (Assist for Competency), (Clinical Management System and hard copy).
 - b. Competency Evaluation (Perform Competency), (Clinical Management System and hard copy), a hard copy is necessary only if technologist does not have Clinical Management System access).
 - c. Daily Log Sheet Exams and Competencies must be entered into the Clinical Management System during the same week of occurrence to avoid a grade reduction of 15%. Course credit will not be given for any clinical experience that is not documented in the Clinical Management System.
- 6. Student self-evaluation (Clinical Management System only) Students are required to complete a Self-evaluation within two weeks of their semester assignment.
- 7. Clinical site and CI evaluations (Clinical Management System only) Students are required to complete evaluations of the Clinical Site and Clinical Instructors by the last Friday of a clinical rotation.
- 8. Competency Tracking Form (hard copy only)
- 9. Time exception (only with program director's permission). If a student forgets to clock in or clock out more than once in a semester, every clinical day with missing clock in or clock out will be considered as an absent day.

Note: Course credit will not be given for any clinical experience that is not documented in the Clinical Management System.

Clinical Packet Submission – Students are required to submit clinical packets at the end of each semester. The packet must be turned in to the HS Division Office (HS 236) or submitted via the Canvas Course by the due date indicated on individual clinical course syllabi. Students are highly encouraged to keep hard copies of all clinical documents for their record.

The clinical packet must include the following hard copy items:

- Attendance Form (if hard copies are used)
- Daily Log (assist for competency, and perform competency entries)
- Competency Tracking Form
- Competency Forms and Clinical Objectives (if hard copies are used)

8.10.1 Clinical Equipment and Examination Room Objectives

The program requires Equipment and Examination Room Objectives be met through site training prior to performing patient care/exam duties. Satisfactory knowledge of these Equipment and Examination Room Objectives is indicated by the signature of a site technologist. The following is list of Equipment and Examination Room Objectives: CR/DR, OXYGEN/SUCTION, GENERAL RADIOGRAPHY EQUIPMENT PERFORMANCE, MOBILE EQUIPMENT, EVENING OBJECTIIVES, and EMERGENCY **EQUIPMENY/EMERGENCY PREPAREDNESS**

- The Equipment and Examination Room Objectives are completed for each location if rotating for the first time, within the first two weeks of the rotation.
- The forms indicate knowledge of proper access and utilization of the patient knowledge of general RIS procedure. management computed/digital image production, knowledge of departmental oxygen/suction access and use, knowledge of the site's policies, procedures, general radiology protocols, and use of equipment, including electronic imaging.
- If a student rotates to the site more than once, the original completed forms remain valid and do not need to be completed again.
- The forms may be site-specific.

In addition to the forms of the Clinical Packet and the Equipment and Examination Room Objectives, there are site-specific forms and requirements, which are achieved through site training prior to performing patient care / exam duties. Satisfactory knowledge of these requirements is indicated by the signature of a site technologist. This may include:

FLUORO ORIENTATION (Some sites may require completion of this objective)

- Completed prior to a fluoroscopy exam competency
- Indicates that the student has learned the general operation of the equipment and software

If a student rotates to the site more than once, the original completed form remains valid.

9.11 Clinical Sites

Clinical rotations are conducted at the following sites:

- AAM Advanced Radiology, Arundel Mills 7556 Teague Rd, #200, Hanover, MD 21076
- AM Advanced Radiology, Millersville (Shipley's Choice), 8601 Veterans Highway, #100, Millersville, MD 21108
- AEC Advanced Radiology, Ellicott City, 4801 Dorsey Hall Drive, #101, Ellicott City, MD 21042
- CAP UM Capital Region Medical Center 901 Harry S. Truman Drive North Largo, MD 20774
- CRC Charter Radiology Columbia Dr. Arvinder Uppal, 10700 Charter Drive, Suite 110, Columbia, MD 21044, Phone: 410-419-5149
- CRR Charter Radiology Reisterstown, 116 Westminster Pike, Suite 104, Reisterstown, MD 21136
- Bowie Bowie Health Center, 15001 Health Center Drive, Bowie, MD 20716
- GMC Grace Medical Center 2000West Baltimore Street, Baltimore, MD 21223-1558
- HCGH Johns Hopkins Howard County General Hospital, 5575 Cedar Lane, Columbia, MD 21044
- HUH Howard University Hospital, 2041 Georgia Avenue NW, Washington, DC 20060
- PFC Patient First- Columbia 5900 Cedar Lane, Columbia, MD 21044
- PFOM Patient First Owings Mills, 10210 Reisterstown Rd, Owings Mills, MD 21117-3606
- UMROI University of MD Rehabilitation & Orthopaedic Institute, 2200 Kernan Drive, Baltimore, MD 21207-6665
- VADC Washington DC VA Medical Center, 50 Irving St NW Washington, DC 20422

9.11.1 Clinical Site Placement Procedure

Students' assignments are non-discriminatory and are based upon the following criteria:

1. The number of students authorized by the JRCERT and agreed upon by the Clinical Site.

- 2. The clinical site has no objection to the placement of a specific student to their site. (Conflicts of interests, relatives employed by that facility, etc.)
- 3. The geographic location is relative to Howard Community College.
- 4. Clinical competency achievement, rigor of the site, and how well a student is expected to acclimate to and learn from the staff at a specific facility. (Some students may learn better at a facility with more one-on-one mentoring, some students may benefit from repetitive rotations to reinforce skills, etc.). This is determined initially by observation and assessment during RADT 106 skills lab sessions.

Note. If a student works/volunteers in one of HCC's clinical sites, the program will attempt to not assign the student to that clinical site. If that is not possible and the student is assigned to a clinical site where he/she works/volunteers, he/she must not use his/her employee ID, radiation monitor, or employee status during student clinical rotation or vice versa.

The following is the Radiography Program's clinical plan of education:

- 1. RADT-108, term 1, students are assigned to clinical sites for 2 observational rotations days, 6.5 hours/day, one day/week, for 2 weeks.
- 2. RADT 118 and RADT 128, which are the 2nd and 3rd terms respectively, students will rotate 6.5 hours /day, two days/week, for a total of 28 days or 180 hours in 15 weeks.
- 3. RADT 238, the 4th term (Summer), students rotate 7.5 hours/day, 4 days / week for a total of 42 days or 240 hours in 8 weeks.
- 4. RADT 248, which is the 5th term, students will rotate 6.5 hours/day, three days/week, for a total of 42 days or 240 hours in 15 weeks.
- 5. RADT 258, the 6th and last term, students will rotate 7.5 hours/day, three days/week, for a total of 32 days or 240 hours in 12 weeks.
- 6. Evening rotation assignments do not exceed the JRCERT's evening maximum rotation limit during the student's tenure in the Program.
- 7. Students will be assigned to at least three main sites over the course of the Program to ensure that adequate and comparable opportunities are afforded to all students to develop the necessary skills and obtain the required number of clinical competencies.
- 8. Clinical assignments also include observational advanced modality experience (optional – CT, MRI, Mammo).
- 9. Clinical rotation schedules are developed to provide all students with comparable clinical experiences. Students are not permitted to change the schedule on their own. Students must remain in their assigned rotation. If the

area has no radiographic exams in progress and there are radiographic exams in another area, the student may change areas under the following conditions:

- a. The Staff Clinical Instructor is in agreement.
- b. The change will not create an overload of students in the area in which the radiographic examination in process (1:1 student to staff ratio will be maintained); and
- c. The change will not interfere with the clinical objectives or opportunities of the student already assigned to the area.
- d. The student will return to the assigned area when there are clinical duties/exams to be performed.
- 10. The Clinical Coordinator will provide students, clinical sites, and the Health Science Division Clinical Liaison electronic notification of site placement in a timely fashion to allow for background checks and other site-specific requirements. The Program Clinical Coordinator will provide students with information about objectives, location, parking information, and contact person. The Clinical Coordinator will also provide room assignments, upon site request. Room assignments will be based on:
 - a. Room/equipment availability
 - b. Staff availability
 - c. Student readiness
 - d. Number of students assigned
- 11. The Clinical Coordinator will provide information about the clinical site regarding objectives.
- 12. A student will not be permitted to rotate to a clinical site if the student has not been clinically cleared by the Division Clinical Liaison Office.

9.11.2 Clinical Competency Requirements

- 1. Students are required to complete 36 mandatory and 15 elective clinical competency exams, as outlined by the American Registry of Radiologic Technologists.
- 2. Students must obtain a minimum number of clinical competencies per semester. The clinical competencies obtained by the student can be a new mandatory, new elective, or recomps (additional) competencies. Recomps (additional) competencies do not require an observe or assist step. New and Recomp competencies are not permitted in the same semester. If the student does not obtain the minimum number of clinical competencies in a semester, the student will receive a course failure and will not be permitted to remain in the Program. The following table indicates the number of competencies per clinical course.

Minimum Number of Competencies	Course	Cumulative number of Competencies	Cumulative Minimum number of Elective Competencies
0	RADT 108	0	0
5	RADT 118	5	0
12	RADT 128	17	0
14	RADT238	31	8
11	RADT 248	42	12
9	RADT 258	51	15

If a student obtains more than the minimum required competencies during a semester, the excess number of competencies cannot be used for subsequent semesters to calculate the minimum. The total number will be used to calculate the ARRT requirement. A student may complete a competency on previously performed exams (recomps) to maintain the minimum competency requirements for a semester, provided that the cumulative number of new competencies is maintained. If a student recomps an exam to fulfill a given semester's competency requirement, it will not be counted toward the cumulative number of competencies. Students can only recomp a specific exam once during the entire program to fulfill a given semester's competency requirement.

3. During the last semester clinical course, Clinical Radiography V (RADT 258), the student will be evaluated for terminal competence. Terminal competency completion is designed to evaluate the student's readiness to graduate from the program with entry level radiologic technology skills. Each student must successfully complete ten (10) terminal competencies, two (2) from each of the following categories: Chest and Thorax, Upper Extremity, Lower Extremity, Head, Spine and pelvis, Abdomen & Fluoroscopy studies. The student must achieve a 85% to successfully complete the terminal competency. If a student achieves less than the required score, the Clinical Coordinator will evaluate the need for and type of remediation required to be eligible for successive attempts to achieve competency. Full details will be provided in the course syllabus.

9.11.3 Semester Competency Planning

All students MUST print a list of exams they are ready for or planning to perform for competency at the beginning of a semester and update it regularly. The list must be provided to the site clinical instructors for which the student is assigned.

9.11.4 RADT Observational and Advanced Modalities Rotation

Students must be HIPAA compliant and receive Blood-borne Pathogens training prior to assignment to an observational rotation for RADT-108. Students are not permitted to perform patient care duties during observational assignments. Students will observe clinical activities that have been introduced in the didactic component of the RADT-106 course. A hundred percent attendance is required for observational rotation days. Any missed observational days may be made up at the discretion of the Program.

For advanced modality rotations, students observe and assist in clinical activities that have been introduced in didactic courses. Students are permitted to perform patient care duties as indicated in the Program Advanced Modality Objectives.

Magnetic Resonance Imaging (MRI) Safety Policy:

Students enrolled in the Radiologic Technology Program are required to have awareness of safe and responsible practices in Magnetic Resonance Imaging (MRI) and practice accordingly.

The student is required to read the ACR Guidance Document on MR Safe Practices: 2013 (http://onlinelibrary.wiley.com/doi/10.1002/jmri.24011/pdf) prior to their initial clinical assignment. The guidelines provided through this URL were established by the American College of Radiology (ACR) http://www.acr.org/ and are intended to promote the safe and responsible clinical practices in Magnetic Resonance Imaging (MRI).

In addition, the student must practice according to any applicable policies and follow screening procedures at <u>each clinical site</u> before entering the MRI area.

Students must also complete a Magnetic Resonance Imaging (MRI) Safety **Screening Form** and submit to the Clinical Coordinator and/or Program Director prior to participating in any clinical rotation.

9.12 Clinical Make-Up

- 1. If a student is eligible for makeup time, it MUST be made-up during finals week in consultation with the clinical coordinator.
- 2. If make up time is due to Excessive Absenteeism
 - a. Students are not allowed to exceed 10 hours/day and 40 hours/week. Therefore, make up time should be scheduled on clinical off time.
 - b. Make up time should at least be 30 minutes at a time. (i.e., not 15 minutes sporadically)

9.13 *Tipping*

Accepting tips or any form of gratuity from a patient, member of a patient's family, and/or staff member is prohibited.

9.14 IR Markers

At least 1 set of initialed right and left lead markers is required and purchased by the student. The purchase of 2 sets is strongly encouraged. The markers cannot be loaned to others. If markers are lost, the student is responsible for replacing the markers. If a lead marker lost or missing, the student must not go to clinical rotation.

9.15 Supervision

Appropriate supervision of students enrolled in the radiologic technology program is necessary for patient safety and appropriate educational practices.

Program Supervision Policy

Student performance of patient exams and/or procedures must be under direct supervision of a qualified radiographer until a student demonstrates competence, and then supervision can be indirect. Radiographer supervision of students is clearly defined by the Joint Review Committee on Education in Radiologic Technology (JRCERT):

Direct Supervision shall mean student supervision by a qualified radiographer who:

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

Indirect Supervision is student supervision provided by a qualified radiographer who is immediately available to assist students regardless of the level of student achievement.

In accordance with applicable IRCERT standards:

- Repeat images must be completed under direct supervision. The presence of a qualified radiographer during the repeat of an unsatisfactory image assures patient safety and proper educational practices.
- Students must be directly supervised during surgical and all mobile procedures, including mobile fluoroscopy procedures regardless of the level of competency.

This policy is in effect the entire time the student is enrolled. Students must acknowledge receipt and adhere to the Program Supervision Policy at all times. Students must refuse to perform any examination if the appropriate level of supervision is not provided. If the student does not abide by this policy, he/she is subject to suspension, or dismissal from the program.

9.16 Confidentiality/HIPAA/OSHA

HCC adheres to the federal HIPAA and OSHA regulations.

- HIPAA The right to privacy of students, faculty, staff, patients, and their families should always be maintained by those associated with the Radiologic Technology Program. It is the student's responsibility to keep confidential all patient and facility information. Any patient or related facility information should be accessed by students only if they are directly involved with the patient's care. Patient information should never be discussed in public areas with anyone, even those involved with patient care. If training materials or images are obtained by a student, all patient information must be removed or masked. Failure to adhere to HIPAA policy may lead to immediate dismissal from the program.
- Occupational Safety and Health Administration (OSHA) Students must understand OSHA regulations and should discuss any observed irregularities with the clinical coordinator or program chair as appropriate.

9.17 Clinical Site Requirements:

Some clinical rotations require additional requirements for clearance. Clinical rotations specific requirements are as follows:

- 1. Advanced Radiology-Ellicott City, Arundel Mills, Millersville, and completion of patient confidentiality form
- 2. Grace Medical Center Submit required forms and obtain hospital ID badge before the first day of clinical rotation.
- 3. University of Maryland Bowie Hospital Center and Capital Region Medica Center submit confidentiality forms C, D and E (obtained from Clinical Coordinator), complete online training, and obtain hospital ID badge prior to start of clinical rotation.
- 4. Johns Hopkins Howard County General Hospital no specific requirement needed
- 5. Howard University Hospital no specific requirement needed

- 6. Patient First-Columbia and Owings Mills application is submitted online and an interview is conducted by a Patient First representative prior to starting clinical rotation.
- 7. University of Maryland Rehabilitation Orthopaedic Institute obtain hospital ID badge and complete online orientation prior to the first week of clinical rotation.
- 8. VADC Washington DC VA Medical Center no specific requirement needed

10 Radiation Protection Policy and Procedure

10.1 General Radiation Protection Policy and Procedure

The Radiologic Technology Program is committed to maintaining radiation exposure levels to As Low As Reasonably Achievable (ALARA), while still allowing each student to obtain all required clinical and didactic competencies. Students must not hold image receptors during any radiographic procedure and should not hold patients during any radiographic procedure when an immobilization method is the appropriate standard of care.

10.2 Personal Monitoring Badges

The purpose of personal monitoring is to ensure that a student's exposure level is kept below the annual effective dose limit. Data from personal monitoring can also provide work habits and working conditions. Students are offered a radiation monitoring badge, free of charge, to document their radiation exposure data during energized laboratories and clinical rotations.

The program follows a strict use of personal monitoring badges to promote safe radiation working habits by individuals and document radiation accidents. Hence:

- 1. Students without radiation monitors will not be allowed in any clinical setting and energized skills labs.
- 2. Badge should be worn at a collar level outside of a lead apron during fluoroscopic procedures or any time a lead apron is worn.
- 3. Students should notify the program immediately if their radiation monitoring badge is lost.
- 4. Declared pregnant students will be provided extra monitoring badge for the fetal. It is to be worn at the waist level and under any protective aprons.
- 5. Radiation exposure reports are posted in the skills lab bulletin board located in HS 264 or shared with students within thirty (30) school days following receipt of the data.

10.3 Annual Occupational Dose Limits:

Any dose received must not exceed the annual occupational dose equivalent limits established by the Nuclear Regulatory Commission regulations standard 10 CFR subpart C-Occupational Dose Limits 20.1201. The program has a published protocol

that identifies a threshold dose for incidents in which student dose limits are exceeded.

Annual Dose Limits

- Whole body
 - 50 mSv (5 rem)/year
- Extremities
 - o 500 mSv (50 rem)/year
- Lens of the eye
 - o 150 mSv (15 rem) / year
- Fetus
 - o 5 mSv (0.5 rem)/gestation
 - o 0.45 mSv (0.045 rem) / month

10.4 Provision for Pregnant Student

Title IX of the Education Amendments of 1972, is a comprehensive federal law that prohibits discrimination on the basis of sex in any federally funded education program or activity. Hence HCC cannot require a pregnant student to withdraw from classes or program or change her educational plans due to pregnancy.

A student who is pregnant or suspects that she might be pregnant has the option of disclosing her pregnancy to the Radiologic Technology Program Chair. If the student chooses to inform the Program Chair, she must do so in writing and bring in a doctor's note of pregnancy that states the expected date of delivery. The program Chair must complete a pregnancy consultation sheet with the student. A copy of the Pregnancy Consultation form is located in the back of this Handbook

If the declared pregnant student continues in the program, she will be provided with a second radiation monitor for the fetus. At any particular time, the student can **withdraw her declaration of pregnancy** and the original Whole body effective annual dose limit for non-pregnant student will be applicable. If, however, the student wants to withdraw from the program, she MUST do so in writing by completing the Withdrawal form.

Note: Performance expectations of a declared pregnant student remain unchanged. A student may not decline to perform patient exams. All program requirements, didactic and clinical, must be met.

10.5 Exceeding dose limits

Radiation dose in excess of the annual dose limit is very rare in Diagnostic Radiology. Students are encouraged and supervised to follow the cardinal principles of radiation protection and achieve the ALARA-principle.

If a dose limit is exceeded:

- The person involved is notified.
- The incidence is documented and signed by the person involved.
- The person involved receives counseling on radiation protection.
- The program chair, clinical coordinator, and clinical instructor examine the cause of the exposure and student or faculty clinical work habits.

Depending on the cause, the Program can impose additional requirements, forbid activities, set penalties, and determine if student dismissal from the program is warranted.

11 Infection Control

This policy is consistent with Centers for Disease Control Recommendations for Standard Precautions.

11.1 General Principles

- 1. Consider all patients' blood and body fluids as infectious materials.
- 2. Equipment, instruments, and utensils which come in contact with patient excretions, secretions and body fluids are considered contaminated.
- 3. Infectious waste includes, but is not limited to, the following:
 - a. all dressings
 - b. used soiled pads/diapers
 - c. intravenous tubing/catheters
 - d. used Foleys and drainage bags
 - e. all used needles/sharps
 - f. trash, gloves, gowns, masks, etc., from isolation room.
 - g. sanitary napkins
 - h. used suction containers and tubing
 - i. chest tubes and other drains and tubes
 - j. specimens
 - k. disposable equipment and supplies once used on a patient
 - l. endotracheal tube, laryngoscope blades, airways

11.2 Precautions

All health-care workers should routinely use appropriate barrier precautions to prevent skin and mucous-membrane exposure when contact with blood or other body fluids of any patient is anticipated. The purpose of personal protective equipment (PPE) is to keep blood and other potentially infectious material from contacting skin, eyes, and mucous membranes. In some cases, adequate protection is provided solely by gloves. In other cases, masks and eye protection will also be needed. In still other situations, gowns, aprons and head covering may be required.

11.3 **Procedures**

- 1. Wash hands frequently between all patients and before and after glove use. Gloves should be changed after contact with each patient and immediately if they're torn or punctured.
- 2. Wear PPE when exposed to any patient's blood and body excretions and/or secretions such as when touching mucous membranes or non-intact skin, handling soiled equipment and venipuncture. (Other examples include):

- a. collecting specimens.
- b. cleaning up fecal/urinary incontinence or handling linen and soiled garments.
- c. bathing a patient.
- d. mouth care and eye care.
- e. removing soiled bed linens.
- f. beginning / discontinuing / intravenous and intraosseous therapies.
- g. administering parenteral injections.
- h. emptying Foleys, bedpans, urinals, emesis basins, NG drainage and wound drainage, sitz baths.
- i. changing dressings, perineal pads, and diapers.
- j. Cleaning any surface, the patient has contact with, spills of blood or body fluids.
- k. Handling tissues or clothing contaminated with tears or perspiration.
- l. Performing suctioning or intubation
- 3. Place disposable syringes and needles, scalpel blades, and other sharp items into designated, puncture-resistant containers. Do not recap, bend or break off needles.
- 4. Place all infectious waste not suitable for disposal in "sharps" container into red (biohazard) plastic bags.
- 5. Wear gowns if splashing or soiling by blood and body fluids is likely. After exposure, remove protective clothing to avoid contaminating self. Place in the assigned area or container.
- 6. Wear other protective covering (e.g., masks, goggles, face shields, etc.) as indicated by particular situations such as newborns, infectious patients, during invasive procedures, or when splashing is likely. Wash after removing protective equipment and as soon as possible after blood contact with skin, eyes, or mucous membranes.
- 7. Individuals with exudative lesions or exposed skin surfaces should refrain from direct patient care and from handling patient-care equipment. Small cuts and scrapes should be covered with an occlusive adhesive dressing or bandage and monitored closely for integrity during patient care activities. Students with large open wounds (even sutured ones), should have a physician's release prior to attending any clinical experience.

11.4 Infection Control during performing CPR

New guidelines by the American Heart Association recommend that the three steps of cardiopulmonary resuscitation (CPR) be rearranged. The first step is chest compressions (instead of establishing the airway), then perform mouth-to-mouth. The new guidelines apply to adults, children, and infants but exclude newborns. The old way was A-B-C -- for airway, breathing and compressions. The new way is C-A-B -- for compressions, airway, and breathing.

Since, students must work under direct or indirect supervision; the technologist should take over CPR by the time they get to the second step - establishing the airway. However, if the student is still performing CPR, he/she must use available resuscitation bags and ventilation devices or mouthpieces for mouth to mouth.

11.5 Exposure Incident

A significant exposure is defined as:

- a. a needle stick or cut caused by a needle or "sharp" that was actually or potentially contaminated with blood or body fluids.
- b. a mucous membrane exposure (i.e., splash to the eye or mouth) to blood or body fluids.
- c. a cutaneous exposure involving large amounts of blood or prolonged contact with blood especially when the exposed skin was chapped, abraded, or afflicted with dermatitis.

If you are directly exposed, **report it immediately** to Site Clinical Instructor, Department Manager, Program Director, and Clinical Coordinator and complete required documentation as outline in 8.9 of this handbook. Use a solution or wipes specified by the site.

- If an accidental exposure occurs, faculty, students, and staff should follow the CDC guidelines for occupational exposure: if needle stick occurs, test for HIV to establish serum negativity first, then retest at 6 weeks, 3 months, 6 months, and 1 year.
- You will be directed to your personal physician for any treatment and follow-up required because of any exposure you encounter. Howard Community College and the clinical facility are not responsible for covering the costs of any associated treatments. Students are strongly urged to obtain their own health insurance.

PROGRAM SEXUAL HARASSMENT PROCEDURES

The Radiologic Technology program is committed to maintaining an equitable and objectionable learning environment. The following behaviors are, therefore, prohibited:

- 1. Behavior that is sexual or fraternizing in nature
- 2. Behavior that interferes with the student's performance
- 3. Behavior that creates an intimidating, hostile or offensive learning/working environment

Sexual Harassment Procedure

- 1. The student is to report to the Clinical Instructor and the Program Chair any occurrence that they considered to be harassment of a sexual nature.
- 2. The Clinical Instructor or Supervisor will notify the appropriate personnel at the clinical education site of the accusation if the accused is an employee. The hospital's policy on sexual harassment will then be followed.
- 3. The Clinical Instructor will notify the Program Chair if the accusation is against a student in the Radiography Program. At which time, the Sexual Harassment Policy, stated in the HCC Student Handbook will be followed.

PREGNANCY COUNSELING SHEET

The purpose of this document is to state that the student named below has met with the Radiologic Technology Program Chair, or designee, in regard to her declaration of pregnancy and the school's policy regarding student pregnancy.

The following topics were discussed:

- 1. Declaration of pregnancy is voluntary.
- 2. The student can withdraw declaration of pregnancy at any time.
- 3. During the entire gestation period, the dose equivalent limit is 5 mSv (0.5 rem)/gestation or 0.45 mSv (0.045 rem) / month.
- The principles of radiation protection including time, distance, and shielding 4. must be applied to limit the fetal dose.
- 5. The student is expected to continue in the clinical and classroom environment. Competencies, objectives, and attendance policies remain in effect.
- 6. Absences may be made up according to the Program's make-up policy
- 7. The student has the option of withdrawing from the program and re-entering the following year, depending on seat availability.
- 8. The program will inform the supervisor of a clinical site where the student is rotating to ensure the privacy of the student is maintained as well as necessary radiation protection is applied.

I,Radiologic Technology Program Cha	, have discussed the abair and fully understand thes	•
I plan to continue with the Radiologic Technology program du pregnancy.		
My approximate conception	date was	
I do not wish to continue with	h the Radiologic Technology	Program at this time.
Student Signature	Date	
Program Chair Signature	 Date	

CONSULTATION SHEET FOR WITHDRAWING DECLARATION OF PREGNANCY

The purpose of this document is to state that the student named below has met with the Radiologic Technology Program Chair in regard to her withdrawing declaration of pregnancy.

The following topics were discussed:

- 1. Immediately turn in the dosimeter that was used for fetal monitoring.
- 2. The student has chosen to continue in the clinical and classroom environment. Competencies, objectives, and attendance policies remain in effect.
- 3. Absences may be made up according to the Program's make-up policy.
- 4. The student has the option of withdrawing from the program and reentering the following year, depending on space and availability.

I, Radiologic Technology Program Cha	, have discussed the above topics with the ir and fully understand these as stated.
•	e Radiologic Technology program. with the Radiologic Technology Program at this
Student Signature	 Date
Program Chair Signature	 Date

EXPOSURE CONTROL PLAN **BLOODBORNE PATHOGEN**

- 1. Distribution of Infection Control Policy to all nursing and allied health students, faculty, and staff.
- 2. Explanation of causes, symptoms, and methods of transmission of pathogens, particularly bloodborne pathogens.
- 3. Explanation of methods that will prevent or reduce exposure to blood borne pathogens including work practices, and personal protective equipment.
- 4. Description of types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment.
- 5. Explanation of reasons for selection of personal protective equipment.
- 6. Description of actions to take in the event of an exposure to potentially infectious materials including method of reporting the incident, medical follow-up, post-exposure evaluation and follow-up. Follow CDC guidelines; www.cdc.gov/
- 7. Description of signs and labels and/or color-coding used to identify hazards.

I verify that I have received training/edu Plan.	ication in all aspects of the Exposure Control
Student	Date

SIGN AND RETURN THIS FORM TO THE DIRECTOR BY THE END OF THE FIRST WEEK, OF THE SEMESTER.

HOWARD COMMUNITY COLLEGE HIPAA Compliance/Confidentiality Standards

By signing this form, you are verify Compliance and agree to adhere to Henrolled in the Radiologic Technolog	IIPAA Compliance		
Student Name (Print):	·		
Student Signature:	Date:	_	
Received by:	Date:	-	

HOWARD COMMUNITY COLLEGE Magnetic Resonance Imaging (MRI) Safety Screening: **Student Name** (first middle last) ______ Gender (F / M) Answer YES or NO to each of the following questions and circle the type of implant you may have: _____ Have you ever had an MRI examination before and had a problem? Have you ever had a surgical operation or procedure of any kind? Do you have any type of electronic, mechanical, or magnetic implant (such as Cardiac Pacemaker, Cardiac Defibrillator, Aneurysm Clip, Neuro-Stimulator, Cochlear Implant, Implanted Drug Pump, any type of Coil, Surgical Mesh, Filter, Valve, or Stent, Penile Implant, Diaphragm, IUD, any Type of Surgical Clip or Staple, Artificial Limb or Joint, Tattoos or Eyeliner, and Radiation Seeds) Have you ever been injured by a metal object or foreign body (e.g., bullet, BB shrapnel)? _____ Have you ever had an injury from a metal object in your eye (metal slivers, metal shavings, other metal object)? _____ Are you pregnant (if applicable) If you answered YES to any of the above questions, you MUST call the program Chair at 443 518 4296 for more information to make sure that it is safe for you to enter into a strong magnet MRI work area. Moreover, you should remove any of the following before entering the MRI work area: Hearing aid, Medication patch, Body piercing, all jewelry, hair pins, bobby pins, barrettes, clips, etc., watch, pager, cell phone, credit and bank cards and all other cards with a magnetic strip. I attest that the above Information is correct to the best of my knowledge. I read and understand the contents of this form and had the opportunity to ask questions regarding the information on this form and MRI work area risks. Signature of Student Completing Form: ______ Date ___/__ Form Information Reviewed By: _____ Program Director's Signature:

Revised on May 2017

HOWARD COMMUNITY COLLEGE Magnetic Resonance Imaging (MRI) Safety Policy:

Students enrolled in the Radiologic Technology Program are required to have awareness of safe and responsible practices in Magnetic Resonance Imaging (MRI) and practice accordingly.

The student is required to read the *ACR Guidance Document on MR Safe Practices:* 2013 (http://onlinelibrary.wiley.com/doi/10.1002/jmri.24011/pdf) prior to their initial clinical assignment. The guidelines provided through this URL were established by the American College of Radiology (ACR) http://www.acr.org/ and are intended to promote the safe and responsible clinical practices in Magnetic Resonance Imaging (MRI).

In addition, the student must practice according to any applicable policies and follow screening procedures at <u>each clinical site</u> before entering the MRI area.

Students must also complete a **Magnetic Resonance Imaging (MRI) Safety Screening Form** and submit to the Clinical Coordinator and Program Director **prior to participating in any clinical rotation.**

Students must also resubmit a Magnetic Resonance Imaging (MRI) Safety Screening Form to the Clinical Coordinator and Program Director if their MRI screening status changes.

I acknowledge receipt of the Magnetic Resonance Imaging (MRI) Safety Policy. I read and understand the contents of this policy and had the opportunity to ask questions regarding MRI safety information.

Signature of Student:	Date	/_	
Faculty Signature:	Date	/	/

HOWARD COMMUNITY COLLEGE Radiation Protection Policy and Procedure

By signing this form, you are verifying that you have received and understand the Radiation Protection Policy and Procedure (Section 9 of Program Handbook) and agree to adhere to the policy and procedures at all times while enrolled in the Radiologic Technology Program.

Student Name (Print):			
Student Signature:	Date:	-	
Received by:	Date:		

HOWARD COMMUNITY COLLEGE **Program Supervision Policy**

Appropriate supervision of students enrolled in the radiologic technology program is necessary for patient safety and appropriate educational practices.

Program Supervision Policy

Student performance of patient exams and/or procedures must be under direct supervision of a qualified radiographer until a student demonstrates competence, and then supervision can be indirect. Radiographer supervision of students is clearly defined by the Joint Review Committee on Education in Radiologic Technology (JRCERT):

Direct Supervision shall mean student supervision by a qualified radiographer who:

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

Indirect Supervision is student supervision provided by a qualified radiographer who is immediately available to assist students regardless of the level of student achievement.

In accordance with applicable JRCERT standards:

- **Repeat images** must be completed under **direct supervision**. The presence of a qualified radiographer during the repeat of an unsatisfactory image assures patient safety and proper educational practices.
- Students must be directly supervised during surgical and all mobile procedures, including mobile fluoroscopy procedures regardless of the level of competency.

This policy is in effect the entire time the student is enrolled. Students must acknowledge receipt and adhere to the Program Supervision Policy at all times. Students must refuse to perform any examination if the appropriate level of supervision is not provided. If the student does not abide by this policy, he/she is subject to suspension, or dismissal from the program.

By signing this form, you are verifying that you have received and understand the **Program Supervision Policy** and agree to adhere to the policy at all times while enrolled in the Radiologic Technology Program. Your signature represents understanding it is your responsibility to perform examinations with the appropriate level of supervision as outlined in this policy.

Student Name (Print):	
Student Signature:	_ Date:

THE RADIOLOGIC TECHNOLOGY PROGRAM STUDENT HANDBOOK RECEIPT

This Student Handbook is a student's guide for the Radiologic Technology (RADT) Program at Howard Community College (HCC). Policies and procedures for the Radiologic Technology Program are included in this handbook. It is the responsibility of each student to read and understand the contents of the handbook. After reading the handbook, each student is required to sign and return the receipt on the last page to indicate that the handbook has been received.

I HAVE READ AND UNDERSTAND THE ABOVE STATEMENTS AND ALL INFORMATION IN THE RADIOLOGIC TECHNOLOGY HANDBOOK

Student's Signature:	Date:
Received by:	Date:

SIGN AND RETURN THIS FORM TO THE DIRECTOR ONE WEEK FOLLOWING RECEIPT.

NON-ACADEMIC CLINICAL COMPLAINT FORM

Student Name:	Date:
Clinical Site:	Site Clinical Preceptor:
Clinical Coordinator:	
Description of Complaint:	
Student Requested Resolution:	
Student Signature:	Date:
Clinical Coordinator Resolution:	
Clinical Coordinator Signature: _	Date:
Program Chair Resolution:	
Program Chair Signature:	Date:
Dean of Health Sciences Resolution:	
Dean Signature:	Date: