

骨 Grady

Atlanta, GA

CLINICAL HANDBOOK SCHOOL OF RADIOLOGIC TECHNOLOGY

2020 - 2022

Revised August 2020

INTRODUCTION TO CLINIAL EDUCATION

The Grady Health System Program in Radiologic Technology is committed to quality health care, quality education, professional standards of accreditation and credibility in the health profession. The major goal of the program in radiologic technology is to enable the student to develop skills that will allow them to perform the duties of a radiologic technologist successfully. The first step in this process is the acquisition of knowledge through classroom and clinical learning experiences. It is then necessary to practice these skills until they are mastered.

Simultaneous with classroom instruction, the first six weeks of orientation will prepare the student for the clinical setting. In the first portion of clinical, students will observe staff radiographers in the clinical area, learning basic patient care handling skills. Participation in the clinical area becomes increasingly more active, with the student assisting the staff radiographers with radiographic procedures, then, actually performing the procedure with the staff radiographer observing. Finally, when the student becomes competent in an area, the student will actually perform the procedure with only remote supervision. A qualified radiographer must be present during student performance of a repeat of any unsatisfactory radiograph.

Enclosed are the components of the clinical evaluation system, which include: policies concerning attendance, uniform attire, clinical reprimand procedures, and a step-by-step description of the areas of clinical rotation, clinical grading system, clinical objectives, sequence of laboratory evaluations, and laboratory objectives.

CLINICAL ROTATIONS

The student is placed on a weekly rotation schedule. During the first year, the student is rotated through routine radiographic areas. These rotations will include, but are not limited to: fluoroscopy, mobile radiography, orthopedics, pediatrics, OR, day/evening emergency, 5 Grady Neighborhood clinics and 3 additional off campus hospitals or clinics. During the second year students are given the opportunity to be scheduled in specialized areas such as: Special Procedures, mammography, CT, MRI, Ultrasound, Nuclear Medicine, Cardiac Cath, Radiation Oncology, PET, GA Cancer Center, CT, and diagnostic, etc. Each student in the Program in Radiologic Technology will spend the percentage of time in the clinical rotations listed below. **This is subject to change based on the COVID pandemic

CLINICAL AREAS AND HOURS

DAY SHIFT	
ORTHO	Orthopedics at Grady Health System
EMER	Emergency Radiology at Grady Health System
EMER 2	Emergency Radiology at Grady Health System – hours; 3pm-7pm M-
	F
OR	Operating Room at Grady Health System
FLUORO	Fluoroscopy at Grady Health System
PORT	Portable Radiography at Grady Health System
CHEST	Chest Radiography at Grady Health System
IDP	Ponce De Leon Center – diagnostic radiology (Satellite Grady Clinic)
ASA YANCEY	Asa Yancey Health Center – diagnostic radiology (Satellite Grady
	Clinic)
Kirkwood	Kirkwood Health Center - diagnostic radiology (Satellite Grady Clinic)
Brookhaven	Brookhaven Health Center - diagnostic radiology (Satellite Grady
	Clinic)
Eastpoint	East Point Health Center - diagnostic radiology (Satellite Grady
	Clinic)
Camp Creek	Camp Creek Comprehensive Health – pending JRCERT approval
PIEDMONT West	Piedmont West Outpatient Center - diagnostic radiography
CHOA HS	Children's Healthcare of Atlanta at Hughes Spalding Day Clinical
Peachtree Orthopedic Clinics	4 locations; POC Main, POC College Park, POC Northside, POC West
	Paces
Kaiser Permanente	2 locations; Kaiser Permanente SouthWood and Townpark
Percent of clinical time	88% of clinical

AFTER HOURS DIAGNOSTIC AREAS	
1 week	Children's Healthcare of Atlanta at Hughes Spalding Evening Clinical 4pm-9:30pm Monday – Thursday off on Friday
2 weeks	Weekend Children's Health Care of Atlanta at Hudson Bridge or Satellite Blvd – 9am-7pm Saturday & Sunday
1 week	Emory University Hospital Midtown – Evening clinical 6pm-10pm Monday –Friday
Percent of clinical time	5% of clinical

SPECIALIZED IMAGING AREAS	Total of 6 weeks; the student chooses from the following areas:	
Nuclear Medicine & PET CT	Interventional	Ultrasound
Mammography	Neuro Radiography	MRI
Computerized Tomography	Radiation Therapy	Cardiac Cath Lab
Percent of clinical time	7% of clinical areas	

Clinical schedules are posted on the Clinical Education Portal <u>and on</u> the third floor sign-in area, emergency area, Clinical instructors offices, and in the Program Office. Students are given a copy of the clinical schedule prior to the beginning of the semester. Clinical sites are sent a copy of clinical schedules at the beginning of each semester.

PROPER UNIFORM ATTIRE

PROPER UNIFORIVI A	
Uniform	Green scrub shirt* & green scrub pants* (Uniform cannot be too tight or too loose.)
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	Any shirt worn under uniform shirt must be solid white, solid gray, or solid black,
	no writing on that undershirt may be visible. Under shirt must be tucked in. Pants
	must come to ankle. Pants cannot touch the floor. Pants must be worn at the
	waist (underwear must not be seen)
Shoes	SOLID Shoes; no open back, sides, or toes. Colors; Gray, White OR Black athletic
	or clinic shoes (including soles of shoe). Shoes must be all leather, or any material
	that does not allows fluid to penetrate.
Socks/Stockings	Solid white or solid black socks or stockings must be worn (no low cut socks)
Lab coat	Green lab coat with school emblem*
ID badge	Identification badge must be worn at collar level with photo visible. (no buttons or
	pins allowed on ID badge unless approved by the Program).
Dosimetry badge	Worn at collar.
Lead markers	Worn on the back of ID badge.
Mask surgical/N-95)	COVID precautions – when entering the hospital the student must be wearing at
and goggles/face	least a cloth mask. While in the clinical setting students are required to wear a
shield	procedural ear loop mask. A cloth mask may we worn over the procedural ear loop
Silicia	mask. Students are also required to wear goggles or a face shield when providing
	patient care.
Jewelry	Rings & bracelets - only one ring or bracelet may be worn on each hand. Necklace
Jewelly	- must be worn under uniform. Earrings - only one earring is allowed in each ear,
	they must be small (no larger than 1 inch in diameter). Other jewelry - no jewelry
	is permitted in the tongue, lip, eyebrow or nose except for religious reasons.
Hairstyles	Hair may be worn as long as you like, but if it is longer than shoulder length, it
nairstyles	MUST be tied back away from the face while working in the hospital in patient care
	areas. If a hairband or barrette are worn it must be solid black, white or gray color
	in color only and ½ inch in width (no headbands). Hairstyles and color must be
	professional (colors not approved include; purple, green, blue, yellow, bright red,
	or pink) and not of extreme design.
Beards	Students must be clean shaven. Beards and mustaches may be grown if they are
Deal us	kept trimmed (no longer than ½ inch away from face) and sanitary. Facial hair
	must not interfere with the seal on the isolation mask.
Cosmetics	
Cosmetics	Use makeup in moderation in a tone which denotes professionalism in a hospital. Fingernails may not extend more than 1/4 inch beyond the fingertip. No acrylic,
	gel, gel polish, SNS (nail powder) or tips on nails, no artificial nails. Students may
	wear the following color nail polish: clear, pearl, white. No jewels or designs in nail polish are allowed.
Evower	Dark glasses will not be worn indoors while on duty.
Eyewear	
Tattoos	Tattoos must be covered during clinical education.
Hats/Caps/	Hats, caps or head coverings are not allowed unless worn for religious reasons.
Head coverings	Must be solid black in color only, no fringe.
Accessories	Fanny packs (black in color) are acceptable. No cell phone OR electronic
	devices/watches turned on.
Underclothes	Underwear should NOT be visible under the uniform.

Electronic Devices	NO electronic devices (including cell phone, I-pod, smart watch, digital watches,
	etc.) are allowed to be used during clinical hours. No electronic devices on during
	class hours except for use of the course material.

^{*}Green scrub shirt, pants, and lab coat must be purchased from the designated vendor.

Uniforms should be **CLEAN AND PRESSED** and in good repair (not torn) at all times including classroom, shoes polished, socks/stockings in good shape. Uniforms should be properly fitted. Students must wear ENTIRE uniform at all times. This dress code is an attempt to be clear, **BUT THE EVALUATION AND/OR DEVIATION OF THE UNIFORM ATTIRE IS LEFT TO THE DISCRETION OF THE PROGRAM.**

Proper uniform attire is to be worn in ALL AREAS of clinical rotation. Students not attired in the proper uniform will receive a Student Disciplinary form (this will affect the clinical grade). The student will be sent home to change into the proper uniform. Time missed will be made up.

RADIATION MONITORING

In order to insure proper precautions against radiation accidents, all radiology personnel and students are provided with dosimeters for radiation monitoring and control. The dosimeter is changed on the first day of each month. Quarterly reports are available in the instructors' offices, so that each person who works in the area has a record of their accumulated radiation dosage. A yearly report is kept in the student's permanent record. All radiography student dosimeters are to be hung on a designated badge board at the end of each clinical rotation shift.

PERSONAL HYGIENE

- Students are expected to take pride in their personal appearance and hygiene. First impressions
 are critical when meeting patients and their families and may influence the professional rapport
 you are able to establish with them. Equally important is how students are regarded by their
 instructors, clinical staff, and physicians who may be a future job reference, employer, or
 colleague.
- 2. Students must demonstrate acceptable personal hygiene. Daily bathing with soap, shampooing hair, shaving, brushing teeth, and wearing deodorant are required.
- 3. Failure to comply with the appropriate personal hygiene policy may result in the student being sent home. Time from clinical missed must be made up.
- 4. No overwhelming or excessive perfume, scented body sprays, lotions, creams, aftershave, or scented hair spray may be worn. The patient's sense of smell is often heightened and extremely sensitive to odors. They may be offended or sickened by perfume or scents.
- 5. Students are not allowed to smoke while attending clinical education. The patient's sense or smell is often heightened and extremely sensitive to odors. They may be offended or sickened by the residual odor of smoke on hair, skin, clothes, and breath.

UNIFORM DEFICIENCY

- Students who are out of proper uniform attire will receive a verbal written warning using the Student Disciplinary form on the first occurrence for failure to follow the proper uniform attire. These offenses include radiation monitoring, electronic devices, & personal hygiene. This will affect the clinical grade.
- 2. The second offence of incorrect uniform attire will warrant a written warning using the Student Disciplinary form.
- 3. The third offence will warrant a written reprimand using the Student Disciplinary form.
- 4. On the fourth offence, further action by the Program (i.e. Suspension, probation, dismissal) using the Student Disciplinary form.

UNETHICAL BEHAVIOR

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- 1. A "profession" is an occupation that has or utilizes a specific body of knowledge, special literature, and a code of ethics. Students are expected to demonstrate ethical professional conduct. Codes of ethics and professional regulations for healthcare providers serve several important purposes:
 - \$ They protect the integrity of the profession
 - \$ They enhance the delivery of patient care
 - \$ They provide opportunities for personal growth while enhancing competence as care givers.
- \$ Unethical behavior is defined as a student exhibiting qualities and characteristics that are inconsistent with the American Society of Radiologic Technologists (ASRT) Practice Standards for Medical Imaging, the American Registry of Radiologic Technologists (ARRT) Code of Ethics for Medical Imaging, The ARRT Rules and Regulations, or that violate appropriate moral, ethical, social, and/or legal aspects.
 - Unethical behavior will include, but is not limited to:
 - a. Violating the patient's rights, including
 - 1. Autonomy
 - 2. Privacy
 - 3. Confidentiality
 - 4. Respect
 - 5. Nondiscrimination
 - 6. Informed consent
 - b. Professional misconduct including:
 - 1. Inappropriate speech and/or tone of voice
 - \$ Unprofessional, negative, or disrespectful attitude
 - 3. Using or being under the influence of alcohol or drugs
 - 4. Dishonesty, lack of integrity, or irresponsibility
 - 5. Violating professional and certification organization policies
 - 6. Off duty misconduct
 - 7. Violating civil or criminal law, including;
 - Negligence
 - b. Assault and/or battery
 - c. Defamation of character
 - d. Invasion of privacy
 - e. False imprisonment
 - f. Malpractice

Penalties will be assessed according to the severity of offense. See rule & regulations.

UNSAFE PRACTICE

- 1. Unsafe practice is defined as a student performing a procedure in an unsafe manner, causing harm or possible harm to patient, clinical staff, Program's faculty, themselves, or equipment.
- 2. Unsafe practice will include, but is not limited to:
 - a. Injuring the patient, clinical staff, Program's faculty, themselves, or others.
 - b. Damaging equipment, accessories, or physical facilities.
 - c. Failure to protect the patient, clinical staff, Program's faculty, themselves, or others from accidental or unnecessary radiation exposure.
 - d. Failure to wear radiation monitoring device
 - e. Excessive permissible radiation doses.
 - f. Failure to practice Universal Precautions or utilize safety devices when appropriate or required.

- g. Holding a patient during a radiographic exam or holding an image receptor during a radiographic exam
- 3. For the first occurrence the student will receive a written reprimand using the Student Disciplinary form.
- 4. For the second occurrence the student will be suspended using the Student Disciplinary form.
- 5. For the third occurrence the student will be placed on probation using the Student Disciplinary form.
- 6. If any other infractions occur the student will be dismissed using the Student Disciplinary form.
- 7. Unsafe practices that require more severe action by the program
 - a. Performing a repeat radiographic image without a Registered Radiographer in the radiographic room. The student will be reprimanded with one day suspension.
 - b. Being under the influence of narcotics, alcoholic beverages, or controlled substances. The student will be dismissed from the Program.

ARRT® CODE OF ETHICS for Radiologic Technologists

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

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SUPERVISION OF STUDENTS

1. Students must perform imaging procedures under the **DIRECT SUPERVISION** of a Radiographer until the student achieves competency. Direct Supervision includes; The Radiographer will review the procedure to be performed, evaluate the condition of the patient, be present during the

- conduct of the procedure, and will review and approve the resulting IMAGES. **All OR** (operating room) procedures are always performed under **DIRECT SUPERVISION**.
- 2. After the student achieves competency, procedures can be performed under the **INDIRECT SUPERVISION** of a Radiographer. Indirect Supervision includes; Radiographer is immediately available to assist students regardless of the level of student achievement. Immediately available is interpreted as the presence of a radiographer adjacent to the room or location where a radiographic procedure is being performed.
- 3. **A qualified radiographer is present during student performance of any repeat of any unsatisfactory radiograph.

4.Students are not allowed to hold patients or image receptors (IR) during any radiographic procedures.

ATTENDANCE POLICIES

Day Shift	CLINICAL HOURS
Grady	8:00am-4:00pm Monday-Friday
CHOA at Hughes Spalding	8:00am-4:00pm Monday-Friday
Piedmont West Outpatient Imaging Center	8:00am-4:00pm Monday-Friday
Peachtree Orthopedics	8:00am-4:00pm Monday-Friday
Kaiser Permanente	8:00am-4:00pm Monday-Friday
Neighborhood Clinics	8:30am- 4:00pm Monday-Friday
Grady Emer 2	3:00pm-7:00pm Monday-Friday
Evening Shift	
ED CHOA at Hughes Spalding	4:00pm – 9:30pm Monday-Thursday (½ hour supper)
EUHM	6:00pm-10pm – Monday-Friday
Weekend Duty	
CHOA Satellite Clinics	9:00am-7:00pm Saturday & Sunday (½ hour lunch & supper)

- 1. Students will clock in and out using the clinical education portal. If a student forgets to clock in /out, or if the computer is unavailable he or she will complete a verification form (located on the clinical education portal) and submit it to Troy Maxwell within one week of the occurrence so that their clinical time can be documented.
 - a. the student is only allowed 2 of these occurrences per semester, after this 1 point will be deducted from the clinical grade for any other occurrences in that semester.
 - b. If the verification form is not received within one week of the occurrence, the student will not be given credit for those clinical hours. The clinical time will be deducted from the student's PTO or if the student has used all of their PTO the student will have to make up the clinical hours.
- 2. The student must be in their proper uniform attire when clocking in or out and must report immediately to their assigned clinical area.
- 3. Students assigned to all shifts in the Emergency Radiology department, CHOA at Hughes Spalding Children's Hospital, the Imaging Center, Cardiac Cath, IDC, Brookhaven, Kirkwood, East Point, Asa Yancey, EUHM, Piedmont West Outpatient Imaging Center, Kaiser Permanente Southwood or Town Park, Peachtree Orthopaedics, and the Radiation Oncology will clock in and out using the clinical education portal in that department.
- 4. Students will have a 30 minute lunch/supper break if in clinical longer than 5 hours. When students are in the clinical setting the staff technologist or supervisor will determine the

lunch/supper times.

5. Students are allowed **one 15 minute break** during their clinical rotation. This break time will be at the discretion of the technologist to whom the student is assigned. Break time will depend upon patient flow. Break times are not always guaranteed.

INCLEMENT WEATHER POLICY

It is urgent that the Grady Health System maintain operations during inclement weather conditions. The Schools of Radiation and Imaging Technologies are full-time programs. In case of inclement weather, every effort should be made to attend training hours as soon as conditions permit. The Education Manager will make a decision concerning closure or late opening of the program. Students will be emailed with the notification. The notification will also be sent to local TV/radio stations and the clinical education portal for announcement. If the Education Manager closes or delays opening, the clinical time will not have to be made up. Any other time missed will be deducted from PTO hours. If time missed exceeds the student's PTO hours, those remaining clinical hours will be made up during semester break. Students must either call or email if conditions prohibit them from attending class/clinical during a weather emergency. When classes must be cancelled because of the weather event, the school will maintain contact with students through phone/emails to let the students know what day(s) classes will be rescheduled or conducted via Zoom on-line.

JURY DUTY/COURT APPEARANCE/MILITARY RESERVES

If a student is summoned for jury duty, subpoenaed for a court appearance, or ordered to report for military reserve duty, he/she must notify and provide supporting documentation to an instructor immediately upon receipt of the notice. When the student has completed their court or jury duty appearance they are expected to immediately return to their assigned clinical area. Time missed for jury duty, court appearance, or military reserve duty will be deducted from PTO time, if time exceeds PTO hours, the remainder of the clinical time missed will be made up during semester break. This time missed will not affect the clinical grade.

BEREAVEMENT LEAVE

Bereavement leave is available for the following family members: spouse, domestic partner, son or daughter, parent, sibling, grandparent, grandchild, mother or father-in-law, sister or brother-in-law, daughter-or-son-in-law, aunt, uncle, step-child, step-parent, step-grandparent, or step-grandchild. A student is required to contact the School if he/she will be absent as a result of the death of an immediate family member. You will be granted up to 3 days of bereavement time per loss of family member. Such absences are not made up. However, if additional time off to attend to family and estate matters is requested, this time missed must be made up during semester break. If time off is requested for funerals of persons other than immediate family members, the time will be treated as authorized leave time and will be deducted from PTO time, if time exceeds PTO hours, the remainder of the clinical time missed will be made up during semester break. This time missed will not affect the clinical grade.

LEAVE OF ABSENCE POLICY

A leave of absence (LOA) is a temporary interruption in a student's program of study. Leaves of absence, including maternity leave, can be granted to the student in unusual or emergency situations. A LOA must meet specified conditions to be counted as a temporary interruption in the student's education. If a LOA does not meet the specified conditions, the student is considered to have ceased attendance and will be withdrawn from the school. In order for a LOA request to qualify for approval:

1. The student must submit a written request to the Program Manager in advance for a LOA. It should include the reason for the request. If the LOA is for health reasons, medical

- documentation of the need for a LOA should accompany the written request.
- 2. The school may grant a LOA to a student who did not provide the written request prior to the LOA, due to unforeseen circumstances. The school must receive a verbal request from the student within 24 hours of the initial absence, followed by a written request within 7 days.
- 3. There must be a reasonable expectation that the student will return from the LOA.
- 4. The LOA together with any additional absences must not exceed a total of 160 clinical hours.
- 5. For medical LOAs, the student must provide a physician's statement of fitness to return to academic class and/or clinical duty.
- 6. If a LOA extends longer than six weeks, the student MUST RESIGN OR BE TERMINATED from the program.
- 7. No more than one leave of absence will be granted during the length of the program.
- 8. A student in their second year may request a LOA from the program for illness, Military reason, etc. The student must return the following year at the beginning of the semester not completed previously.

HOLIDAYS

The following holidays are observed by the Programs in Radiation and Imaging Technologies. Students are off on all Holidays. Some holidays occur during semester breaks.

Labor Day (one day)	New Year Day (one day)	July 4 th (one day)
Thanksgiving (two days)	M.L. King Birthday (one day)	
Christmas eve and Christmas (2 days)	Memorial Day (one day)	

ACADEMIC BREAKS

- 1. Students are given one to four weeks off between semesters.
- 2. No other time off is given, unless approved by the Program.
- 3. Students will make up any time missed from clinical over their allotted PTO time.
- 4. Students are given a memo at the end of the semester to let them know how much clinical time they owe, the dates of makeup time, and the clinical area in which the time is to be made up. All policies concerning clinical procedures will be followed during make up time. Students are evaluated by the Staff technologist during the makeup time. Students will complete makeup time verification form at the end of each day.

THREE MONTH PROBATIONARY PERIOD

During the first three months of the Program the student is not allowed to take any time off with the exception of sick or Dr. appointments, or court occurrences.

PERSONAL TIME OFF (PTO)

- 1. Students are allowed 12 hours of PTO time each semester. This time will be used for sickness, tardiness, or time off. Any additional time missed from the program will be made up during the semester break.
- 2. In in the event that a student has time remaining at the end of the semester, that student will be off whatever the remainder of the time left in the PTO time bank.
- 4. PTO time does not carry over to the next semester.
- 3. Attendance will affect the overall clinical grade.

SICKNESS

1. If the student is sick, he/she must call the Clinical Instructors, ext. (404) 616-3584 or (404) 616-3352 between 7:30 am - 9:00 am for Day Duty and leave a message on Voice Mail. Call

between 2:00 pm - 4:00 pm for Evening Duty (and you must call the Evening Duty Supervisor). If you are sick when assigned to any of the affiliates you must call within 2 hours of the beginning of the clinical shift. The student must also call the Clinical Instructors (ext. 404 616-3584). If the student fails to call in by the designated time, this will be considered an Unauthorized Absence. Students may e-mail Troy Maxwell at tmaxwell@gmh.edu.

- 2. Sick time over the allotted 12 hours PTO will be made up at the end of the semester.
- 3. Sick time without a Dr. note of documentation will affect the Clinical grade. (One point is subtracted from the final clinical grade for each occurrence).
- 4. The program may require medical verification for your illnesses. Medical verification must be turned in to the Clinical Instructors within 48 hours of returning to clinical duty. Sick time with medical verification will not affect the clinical grade.
- 5. Absences of 20 or more hours in a semester are excessive. If a student misses more than 20 hours, his/her clinical attendance record will be reviewed by the Program for further action, i.e. probation, dismissal.
- 6. If attendance does not improve during the probationary period imposed by the Program, the student will be subject to further action.
- 7. Medical leave of up to 6 weeks (includes class and clinical) may be approved by the program. It requires medical verification of need and a request by the student to be off.
- 8. If a student misses more than 160 clinical hours during his/her training they will be dismissed from the program. The Program will take into consideration a documented consecutive illness.

AUTHORIZED LEAVE TIME

- Educational leave time off, such as seminars and/or conventions, with approval from the Program and with verification of attendance, does not have to be made up. Those on Probation may not be considered for this type of time away from the Program. If a student fails to show verification of attendance, this time is considered an unauthorized absence and 5 points will be subtracted from the final clinical grade.
- 2. Jury Duty leave will be granted when students present verification of Jury Duty. Clinical time missed will be deducted from the PTO time, or the student can request to change his rotational shift for the period of Jury Duty.
- 3. Funeral leave for death in the immediate family does not have to be made up. (See Bereavement Leave policy)
- 4. Notification of military reserve leave must be presented in advance to the Program. The time taken off for this leave will be deducted from the PTO time; any remainder of time owed must be made up at the end of the semester.
- 5. For a Declared Pregnancy, Pregnancy Leave may be arranged with the Program. The student must submit a memo to the Program Director to receive Pregnancy leave time off. Time missed will be deducted from the PTO, any remainder of time owed must be made up at the end of the semester(s). (See Leave of Absence Policy)
- 6. Time off for sickness in immediate family (spouse, children) will be deducted from the PTO time, any remainder of time owed must be made up at the end of the semester.
- 7. Elective Surgery All elective surgery must be scheduled during Semester breaks.
- 8. Time off Students must submit a written request 24 hours in advance prior to taking the time off. The student must obtain approval from the Clinical Instructors before taking the time off. If not received in advance, it will be considered an Unplanned Absence. Students may e-mail Troy Maxwell at tmaxwell@gmh.edu (must be 24 hours in advance of time off). Time missed will be deducted from the PTO, any remainder of time owed

must be made up at the end of the semester.

UNPLANNED ABSENCES

- 1. Unplanned personal leave includes, but is not limited to: car trouble, family difficulties, personal problems, etc.
- 2. More than 3 days of unplanned absences in one semester is considered excessive.
- 3. If the student is not coming in for any reason, he/she must call the Clinical Instructors, ext. (404) 616-3584 or (404) 616-3352 between 7:30 am 9:00 am for Day Duty and leave a message on Voice Mail. Call between 2:00 pm 4:00 pm for Evening Duty (and you must call the Evening Duty Supervisor. If you are sick when assigned to any of the affiliates you must call within 2 hours of the beginning of the clinical shift. The student must also call the Clinical Instructors (ext. 404 616-3584). If the student fails to call in by the designated time, this will be considered an Unauthorized Absence. Students may e-mail Troy Maxwell at tmaxwell@gmh.edu
- 4. Unplanned absences will affect the Clinical grade. One point is subtracted from the final clinical grade for each occurrence.
- The Clinical hours missed over the allotted 12 hours PTO will be made up during semester break.
- 6. If a student misses more than 20 hours, his/her clinical attendance record will be reviewed by the Program for further action, i.e. probation, dismissal, etc.

UNAUTHORIZED ABSENCES

- 1. The following absences are considered Unauthorized Absences:
 - a. Failure to call in sick.
 - b. Failure to request Authorized Leave Time.
 - c. Failure to produce written medical excuse when requested by the Program.
 - d. Failure to come in for clinical duty.
 - e. Leaving clinical area without proper authorization/notification.
 - f. Taking unauthorized time off. As an example: Time off denied by the Program,

but the student calls in sick anyway. This will be subject to action by the Program, i.e. suspension or termination.

- g. Falsification of time records
- h. Failure to call in before the end of the clinical training shift.
- i. Failure to perform exams when in assigned clinical area
- j. Called in late to clinical, but never came into clinical.
- 2. If a student fails to call or come in for 3 consecutive days, the student must report to the Program Director <u>before</u> returning to clinical duty.
- 3. Unauthorized absences will severely affect the clinical grade. Five points are subtracted from the final clinical grade for each Unauthorized Absence.
- 4. Students will receive a written reprimand for an unauthorized absence. Penalties for unauthorized absences will be determined by the Program in accordance with their severity.
- 5. Clinical hours missed for the first Unauthorized Absences will be deduced from PTO. The Clinical hours over the allotted 12 hours PTO will be made up during semester break.
- 6. If a student misses more than 160 clinical hours during his/her training they will be dismissed from the program. The Program will take into consideration a documented chronic illness.

TARDINESS

- 1. More than 3 occurrences of tardiness in a semester are considered excessive. A written warning will be given when a student has 4 tardies.
- 2. Excessive tardiness will warrant a written reprimand (6 tardies). If it continues to be excessive, the student will come before the Program for further action.
- 3. The Clinical hours missed over the allotted 12 hours PTO will be made up during semester break.
- 4. If you are late by 8 minutes a **late occurrence** is recorded. You are considered to have a **late arrival** 1 minute after your assigned shift starts. A **late arrival** is 1 to 7 minutes. For every 4 **late arrivals** one late will be recorded.
- 5. Time owed is recorded in quarter hours i.e., if you are late 10 minutes, you owe 15 minutes.
- 6. Tardiness will affect the clinical grade. One point is subtracted from the final clinical grade for each occurrence.

MAKE UP TIME

- If because of illness, late occurrences or absences, the student has missed clinical hours above and beyond the 12 PTO hours, the time must be made up during semester break. Every attempt will be made to schedule the makeup time in the area in which it was missed.
- 2. Make up time during the semester break will be scheduled through the Program.
- 3. Students are given a memo at the end of the semester to let them know how much clinical time they owe, the dates of makeup time, and the clinical area in which the time is to be made up.
- 4. All policies concerning clinical procedures will be followed during make up time. Students are evaluated by the Staff technologist during the makeup time.
- 5. If the student fails to show up for the assigned make up time, this will be considered unauthorized absence (5 points are subtracted from the final clinical grade), and the student will receive disciplinary action from the Program.
- 6. Tardiness & absences from makeup time will affect the grade the same as during the semester.
- 7. The student will be assigned a lunch/dinner break during the hours he is doing make up time, no credit will be given for the lunch/dinner break time

INCOMPLETE IN CLINICAL GRADE

- 1. If a student does not make up all time owed during the semester break they will receive an Incomplete in Clinical.
- 2. An Incomplete in Clinical may warrant disciplinary action by the Program.
- 3. All Clinical time owed to the Program must be made up before the Incomplete grade is removed. Failure to complete all make up time during the semester break without a Doctor's verification or court verification will warrant further action. The time must be made up during the next semester break, if it is not made up at this time the student will be dismissed
- 4. If at any point during the Senior year a student accumulates more time owed than the Program feels may be made up during the remaining semester breaks, that student will not graduate with his/her class. The time will be made up during the semester following graduation. The student will not receive a diploma until all time owed is made up.
- 5. If a student misses more than 160 clinical hours during his/her training they will be

dismissed from the program. The Program will take into consideration a documented chronic illness.

CLINICAL REPRIMAND PROCEDURE

- 1. In the event of an offense in the area of clinical performance that warrants action, a student will be disciplined. Disciplinary action may include: verbal warnings, written reprimands, written reprimands with suspension, and dismissal.
- 2. If the problem is not corrected and the student again commits the same offense, the student will be subject to probation with suspension of up to 5 days.
- 3. On the third offense, the student will be dismissed.
- 4. If a student receives a total of 3 reprimands for various offenses, they will be placed on clinical probation.

CLINICAL PROBATION

Students will be subject to probation who:

- 1. Fails to obtain a "B" average (80%) in clinical rotations or competency evaluations, has excessive sick time, late, and/or absenteeism, or displays unethical performance in patient care or departmental procedures and relationships.
- 2. A student who has 2 unauthorized absences in the program
 - 3. Has failed 4 competencies.
 - 4. Been late 7 or more times during a semester
- 5. Misses more than 30 hours without documentation of absences.
- 6. A student who receives 3 Negative Feedback evaluations in one semester.
 - 7. A student who has been placed on Clinical probation more than two times while in the Program will be dismissed.

CLINICAL SUSPENSION

Students who are reprimanded with a clinical suspension from the Program for clinical reasons will have five points deducted from the Clinical grade at the end of the semester for each suspension. When the student completes an application to take the ARRT exam he/she will have to give a written explanation about the incident.

CLINICAL POLICIES AND ATTENDANCE EVALUATION PROCEDURE

At the end of every semester, the Program will evaluate students who:

- 1. Misses more than 20 clinical hours (without documented excuses)
- 2. Have any unauthorized absence
- 3. Have 6 or more late occurrences
- 4. Have a repeated pattern of lateness in consecutive semesters
- 5. Have 4 or more unplanned absences
- 6. Have 3 or more Negative Feedbacks in one semester
- 7. Uniform Deficiency
- 8. Unsafe Practice

Disciplinary action:

The Program reserves the right, at their discretion, to recommend a student for reprimand, probation, or dismissal whether or not the student has been previously reprimanded for a clinical attendance violation. The Program will decide what, if any, disciplinary action is warranted according to the following established guidelines:

Violation: Clinical hours missed within one semester	Action	
	Action	
a. 21-29 hours missed	Written reprimand	
b. 30 or more hours missed	Clinical probation	
2. Violation; Unauthorized Absences during ENTIRE clinical	Action	
training	14/21	
a. 1 unauthorized absence	Written reprimand	
b. 2 unauthorized absence	Clinical probation	
c. 3 unauthorized absence	Dismissal	
3. Violation; Late occurrences within one semester	Action	
a. 4 late occurrences	Written warning	
b. 6 late occurrences	Written reprimand	
b. 7 or more late occurrences	Clinical probation	
4. Violation; unplanned absences within one semester	Action	
a. 4 unplanned absences	Written reprimand	
b. 5 or more unplanned absences	Clinical probation	
5. Negative Feedback	Action	
a. 3 Negative Feedbacks in one semester	Written reprimand	
b. 4 Negative Feedbacks in one semester	Clinical probation	
6. Uniform Deficiency	Action	
a. first offense	Written verbal warning	
b. second offense	Written reprimand	
c. third offense	Clinical probation	
d. fourth offense	Further action by program,	
	including Dismissal	
7. Unsafe Practice		
a. first offense	Written reprimand	
b. second offense	Written reprimand with	
	Suspension	
c. third offense	Clinical probation	
d. fourth offense	Dismissal	
Performing repeat radiographic image without a Registered Radiographer	Written reprimand with	
in the radiographic room	suspension of 1 day	
Being under the influence of narcotics, alcoholic beverages, or controlled	Dismissal	
substances – first offence		
8. Violation; Combination of problems for such occurrences	Action	
and other clinical factors as:		
a. Clinical reprimands for 2 or more semesters	Clinical probation	
b. Violation of clinical probation	Clinical probation	
c. Repeated pattern of lateness in consecutive semesters	Clinical probation	
d. Failure of 3 or more competency evaluations in one	Clinical probation	
semester		
e. More than a total of 2 Clinical or academic probations	Dismissal	
f. Failure of a total of 8 positioning competency evaluations	Dismissal	
Places see pages EQ 61 of the General Handbook for all additional disciplinary, policies		

Please see pages 59-61 of the General Handbook for all additional disciplinary policies.

CLINICAL EVALUATION PLAN

CLINICAL EVALUATION GRADING SYSTEM

The clinical grade is derived in the following manner:

	First Semester	2 nd – 6 th Semester
Faculty Evaluation	10%	10%
Critical Thinking Lab $(1^{st} - 3^{rd} \text{ semesters})$ and Clinical Challenge (starts $4^{th} - 6^{th} \text{ semesters})$	15%	15%
Competency Evaluations	25%	25%
Staff Evaluations	20%	20%
Image Evaluations	0%	15%
Image Critique Class	15%	15%
Clinical Quizzes	15%	0%
	100%	100%

Attendance will affect the clinical grade in the following manner:

- 1. Lates One point will be deducted from the final clinical grade that semester for each late.
- 2. Forget to clock in or out after the second occurrence of failure to clock in or out, 1 point will be deducted from the final clinical grade that semester for each occurrence of forgetting to clock in or out with a signed time verification form. A student that does not return a signed time verification form within one week of the occurrence will not be given credit for that clinical day, the clinical time will be deducted from the student's PTO or it must be made up at the end of the semester if the student has not PTO time remaining.
- 3. Sick time off One point will be deducted from the final clinical grade that semester for each sick day off that is not accompanied by a Doctor's excuse.
- 4. Unplanned absences One point will be deducted from the final clinical grade that semester for each unplanned absence.
- 5. Unauthorized absence Five points will be deducted from the final clinical grade that semester for each unauthorized absence.
- 6. No points will be deducted for Authorized time off or sick time off with a Dr. note.

The Clinical grade is a semester grade, and affects the overall GPA.

FACULTY EVALUATIONS

1. The Radiography faculty will complete the Clinical and Professional Development Evaluation form for each student.

2. The faculty will evaluate the student in the following areas:

Patient Rapport/Patient Assessment Interpersonal relationships

Professional ethics Judgment
Organization of work Initiative

Personal appearance Speed/Confidence Quantity of work Quality of work

Dependability

3. The Clinical faculty will meet with each student to discuss the Clinical and Professional Development Evaluation each semester.

STAFF EVALUATIONS

1. Clinical evaluations are filled out on a weekly basis. The staff technologist that supervised

- the student during the clinical rotation will log into the clinical education portal to complete the evaluation.
- 2. The student is evaluated according to their level of training.
- 3. Clinical objectives are included in this manual and serve as a guideline for the student's competency in that area. They also serve as a basis in determining the student's evaluation score.
- 4. Students should check the clinical education portal to view their evaluation grades.
- 5. If a student receives a Positive feedback form for recognition for outstanding clinical performance, ONE POINT will be ADDED for to the staff evaluation grade for that week. Students cannot earn more than 5 positive feedback recognitions per semester. Students may earn 1 Positive feedback for each occurrence of outstanding clinical performance.
- 6. If a student receives a Negative feedback form for poor clinical performance, ONE POINT will be DEDUCTED from the staff evaluation grade for that week. Students who receive 3 or more Negative feedback forms in one semester will be subject to Disciplinary action.

COMPETENCY EVALUATIONS

- The lab dates and evaluation dates are posted on the clinical education portal (competency list is on page19-21). If the student does not attend the scheduled lab, without a verifiable excuse, 5 points will be taken off the grade of each procedure being demonstrated
- 2. The student is given objectives for the procedures, which are In the Competency Guideline book posted on the clinical education portal.
- 3. The Instructors will demonstrate each patient care, equipment manipulation and/or positioning procedure to the student.
- 4. The student will be evaluated on his/her performance on an actual patient in the Radiology Department when the student feels they are ready, the student will ask one of the Clinical Staff to evaluate their performance. The patient's condition should be assessed before attempting to perform the competency. Once the competency checkoff has been started it must be completed. This includes competencies in which the student has a repeat of a projection, or that projection would have been a repeat if the technologist must change some aspect of the projection.
- 5. Some competency evaluations will be simulated. Lab dates and times are posted on the clinical education portal. If a student misses their assigned lab date, it will be rescheduled. However the student must have a verifiable excuse for missing the lab date. If the student does not have an excuse, 5 points will be taken off each of the competencies being evaluated. If a student is not ready to do the simulated lab on the date that it is scheduled, 5 points will be taken off the grade of each of those competency exams scheduled for that date.
- 6. Each student must perform at least the minimum competency evaluations scheduled for that semester. IF THE STUDENT DOES NOT COMPLETE THE MINIMUM NUMBER OF COMPETENCIES REQUIRED, 5 POINTS WILL BE SUBTRACTED FROM THE **FINAL GRADE** FOR EACH COMPETENCY NOT COMPLETED. By the end of the Spring semester of the Senior year, all initial competency evaluations must be completed.
- 7. If a student does not complete all required competencies the following semester he/she will be placed on clinical probation. Points are still subtracted from the final Clinical grade.
- 8. If a student does not complete all required competencies for the third semester he/she will be suspended from the Program and again be placed on clinical probation. Points are still subtracted from the final Clinical grade.

- 9. In the event that a student makes below a score of 80% on a procedure, additional instruction will be given in that area and the student will be reevaluated to determine competency in that particular procedure. The original grade stands, and is the basis of the student's continuation in the program.
- 10. If the student fails the reevaluation, he will be allowed only one additional reevaluation.
- 11. In the event that the second reevaluation is not successful, it will be considered grounds for probation or dismissal, depending on the student's overall clinical performance.
- 12. All reevaluations are given on a pass or fail grade.
- 13. If a student fails 4 positioning competencies they will be placed on probation. If the student fails 7 positioning competencies they will be placed on probation again. If a student fails 8 positioning competencies during training they will be subject to dismissal, no matter at what point they are in their clinical training.
- 14. During the last two semesters, Senior students must perform final competency procedures. Students must perform at least 10 final competencies per semester. These are evaluated by Staff Radiographers. These count as 25% of the Competency grade.

CALCULATION OF COMPETENCY GRADE

The clinical competency grade is calculated in the following manner:

- 1. Procedures consisting of one projection each evaluated area of the Performance Evaluation section counts 10 points. If the radiograph is repeated (or would be a repeat in the case of a simulation) counts 20 points. The Patient Care and Radiation Protection sections count 5 points for each evaluated area.
- 2. Procedures consisting of two projections each evaluated area of the Performance Evaluation counts 5 points. If the radiograph is repeated (or would be a repeat in the case of a simulation) counts 10 points. The Patient Care and Radiation Protection sections count 5 points for each evaluated area.
- 3. Procedures consisting of more than two projections each evaluated area of the Performance Evaluation counts 5 points. If the radiograph is repeated (or would be a repeat in the case of a simulation) counts 5 points. The Patient Care and Radiation Protection sections count 5 points for each evaluated area.

This counts as 95% of the competency grade. Anatomy counts as 5% of the competency grade. The Anatomy images are posted on the clinical education portal.

RADIOGRAPHIC IMAGE EVALUATIONS

Log Record

- 1. A Log Record (log sheet) will be kept by all students every semester.
- 2. This record will include:

Student's name and ID number

Date

Examination performed

Rotational area

Medical Record number of the patient (Grady patients and competencies only)

Whether the student performed the exam alone or was assisted

If the exam was a competency grade

List of technical factors used (mAs & KV)

Indicate that radiation protection was utilized (collimation, no repeats, etc)

If a repeat was needed and the technologist that assisted with the repeat must be listed

Comments about the exam

3. This information is to be reported for **EVERY** patient with which the student works.

Radiographic Image Critique Class

1. The criteria for evaluation of images is presented in the Procedures class. Well positioned and poorly positioned images will be demonstrated.

2. As a small group and individual activity, the students will evaluate images using the following criteria

Positioning (list criteria for evaluation and if it is correct in this exam)

Transverse and longitudinal centering Correct collimation (3 cone cuts seen)
Correct use of R & L markers Correct projections for procedure

Evidence of Radiation Protection Correct exposure factors

Image sent to PACS correctly Artifacts, motion

Evaluation of images – was procedure done correctly

3. The group will critique the images with the Clinical Faculty.

4. In the 1st – 2nd semesters the students are given Procedure image to critique. In the 3rd semester the students will find poorly positioned images and critique them. In the 4th semester students evaluate images for pathology. The 5th students develop sectional Anatomy PowerPoints. In the 6th semester students develop a clinical best work image portfolio.

5. This makes up 15% of the clinical grade.

Image Evaluation of Student Images

1. A schedule of image evaluation dates is given to all students.

2. This evaluation will include a critique of:

Positioning Transverse and longitudinal centering

Correct collimation (4 cone cuts seen) Correct use of R & L markers

Correct projections for procedure Evidence of Radiation Protection

Correct exposure factors Artifacts, motion
Image sent to PACS correctly Radiographic anatomy

Evaluation of images – was procedure done correctly

4. Each student will critique a maximum of 2 radiographic procedures that they have performed each semester.

5. Grade – counts as 15% of clinical grade 2nd – 6th semesters

IMAGE EVALUATION PROCEDURES

Chest (mandatory) 2 nd semester	C-spine or L-spine (mandatory)	T-spine
Hand	Wrist	Forearm
Elbow	Humerus	Shoulder
Foot	Ankle	Leg
Knee	Femur	Pelvis or hip

Radiographic Anatomy Evaluation

- 1. Radiographic anatomy for that procedure is available to the student on the clinical education portal
- 2. Following the positioning competency evaluation, the student will be orally tested on radiographic anatomy.
- 3. Following Image Evaluation, the student will be orally tested on radiographic anatomy of

- each procedure covered in the film evaluation.
- 4. Anatomy counts as 5% of the competency evaluation or Image evaluation grade. The student must score 80% to be considered competent.

CRITICAL THINKING LAB (1st – 3rd semesters)

- 1. Students will be assigned a Critical Thinking Case Study in the 1st 3rd semester. The student(s) will apply critical thinking skills in order to solve a clinical problem. Some case studies will be done as a group and some on an individual level. The Clinical Faculty will assess the student(s) solution and give feedback.
- 2. If a student misses their assigned Critical Thinking Case Study check off date, it will be rescheduled. However the student must have a verifiable excuse for missing the scheduled date. If the student does not have an excuse, 5 points will be taken off the grade.

Fall Semester First year	Ethical Critical Thinking (in class presentation)
Spring Semester First year	Nursing Critical Thinking (in class presentation)
Summer Semester First year	Group critical thinking scenarios

CRITICAL CHALLENGE LAB (4th-6th semesters)

The Critical Challenge is use to "challenge" the student's individual critical thinking skill. Similar to the Critical Thinking lab, this lab will test the student individually instead of as a group. Using two students, one is the patient only and can NOT offer any help to the student being tested, the other student is given a challenge to complete. The student is NOT given the challenge in advance. This allows for the instructor to see how well the student thinks on his/her feet.

- 1. Each student will be assigned a Critical Challenge each semester, starting in the 4th semester. The student will draw a challenge from a bowl on day of their check off and perform as needed after being given a few minutes to think of how to modify the exam for the patient. The instructor will assess the student's solution and give feedback.
- 2. If a student misses their assigned Critical Challenge on the check off date, it will be rescheduled. However, the student must have a verifiable excuse for missing the scheduled lab. If the student does not have a verifiable excuse, 5 points will be deducted from the grade.

Fall Semester Senior year	Trauma Extremity
Fall Semester Senior year	Routine Spines
Spring Semester Senior year	Trauma Spines
Spring Semester Senior year	Skull or Sinuses
Summer Semester Senior year	Mandible, Nasal bones, or Facial bones

Clinical Review

- 1. The clinical faculty will determine which students need additional education in the clinical area at the end of each semester. Students may also sign up for Clinical Review.
- 2. The clinical Instructors will hold simulation lab practices with these students. This is treated like any other scheduled lab.

Clinical Grade - Miscellaneous

- 1. All evaluations are discussed with the student and are kept in the student's permanent record in the Clinical Instructor's office.
- 2. All evaluations must be signed by the student.

- 3. Each week the student will evaluate the staff technologist who supervised them in that clinical area, and the Clinical site. At the end of the semester the evaluations are given to the Administrative Technologist in charge of that area. No student identifiers are seen by the Technologist
- 4. Students must complete a department Orientation for the clinical area to which they are assigned. These are only completed the first time the student rotates through a new clinical area.

SEMESTER COMPETENCIES

FALL SEMESTER

Competencies;		Simulation competencies
Students must perform at least; 2 competencies from the list		Mandatory - must perform all
below. Competencies are done on adult patients only – only		in this category.
exception are the finger/thumb, toes, and forearm which can be		
done on a person 5 years and ol	der.	
Chest	Toes (age 10 – adult)	Handwashing (pass/fail grade)
Finger/thumb (age 10-adult)	Foot - non standing	Restraints (pass/fail grade)
Hand	Foot - standing	Patient transfer - wheel chair
Wrist	Calcaneus (heel)	Patient transfer - stretcher
Forearm (age 10 – adult)	Ankle - non standing	Equipment manipulation
Elbow	Ankle - standing	
Shoulder	Leg	Ballcatchers hands
Ortho shoulder (Y & Grashey)	Knee - non standing	Elbow (obliques and Schmidt)
Humerus	Knee - standing	
Clavicle	Patella	
	Intercondyloid fossa	

SPRING SEMESTER

Competencies; Students must Perform at least 10 from the list above or from the list for this semester. This list is for adult patients only. Adult patients only – only exceptions are; finger/thumb, toes, and forearm which can be done on a person 5 years or older.		Simulation competencies Mandatory - must perform all in this category.
Pelvis	Femur	Inlet & Outlet pelvis
Hip	2 Fluoro (see list below)	Judet pelvis
C-spine	Wheel chair stretcher chest	
T-spine	Mobile chest	
L-spine	Mobile extremity	
C-spine Flexion & Extension	Mobile Abdomen	
L-spine Flexion & Extension	OR 2 view - orthopedic	
Sacrum and/or coccyx		
Acute Abdomen (supine & upright abdomen)	OR 1 view; hand, wrist, forearm, finger, cysto, or port placement	
Geriatric Chest	Pediatric Chest (age 0-3)	
Geriatric Upper or Lower Extremity	Pediatric Extremity (age 0-6)	
Geriatric hip or spine		
All Geriatric comps - 65 years or older with a condition caused by aging.		

Students must select two fluoroscopic procedures from this section and perform per site protocol.		
Upper GI	Contrast Enema (BE)	Small Bowel series
Esophagus (not Mod BAS)	Cystography/Cystourethrography	ERCP
Myelography	Arthography	Hysterosalpingography

SUMMER SEMESTER

Competencies;	Simulation competencies
Students must Perform at least 10 from the list above or from	Mandatory - must perform all in this
the list for this semester. This list is for adult patients only.	category
Adult patients only – only exceptions are; finger/thumb, toes, or	
forearm which can be done on a person 5 or older.	
Trauma upper extremity (must be done in ER radiology on an	Ribs
adult, or can be done at CHOA on a person 8 years or older.)	Decubitus Chest
Trauma lower extremity (must be done in Emer radiology)	Soft tissue neck
	Patient Restraints

FALL SEMESTER

Competencies	Simulation Competencies
Students must perform at least 12 competencies	Mandatory – must perform all in this category
from the lists above for this semester.	
Critical Thinking competency 1	AC joint
	Scapula
	Sternum
	SI joints
	XTL C-spine
	XTL hip

SPRING SEMESTER

Competencies	Simulation Competencies
Students must perform all of the remaining initial	Mandatory – must perform all in this category
competencies from the lists above.	
Students must perform 10 final competencies	
(list on next page)	
Critical Thinking competency 2	Sinus
	Skull

SUMMER SEMESTER

Competencies	Simulations
Students must perform 10 final competencies (list	Mandatory – must perform all in this category
on next page)	
	Mandible
	Facial bones
	Nasal bones

TOTAL COMPETENCIES	
32 ARRT Initial Mandatory Competencies performed on	40 ARRT Mandatory/Electives performed on
patients	Patients
3 ARRT Mandatory Competencies simulated	10 simulated ARRT Mandatory/Electives
8 ARRT Elective Competencies performed on patients	10 General Patient Care competencies
7 ARRT Elective Competencies simulated	
50 Competencies required by ARRT	
16 Additional Program Competencies	
20 Final Competencies – all performed on patients	
86 Total Competencies	

Patient Care Competencies

BLS CPR certification	Vital signs – Blood pressure
Vital signs – Temperature	Vital signs – Pulse
Vital signs – Respiration	Vital signs – Pulse Oximetry
Sterile Aseptic Technique	Medical Aseptic Technique
Venipuncture	Assisted Patient Transfer
Care of Patient Medical equipment	

FINAL COMPETENCIES

Category 1 - Students must perform 11 from this category. One of the eleven from this category must be either a Pediatric (age 1-6), or a geriatric (age 65 or older with a condition of aging) patient. One of the eleven from this category must be a trauma or critical thinking with explanation of	
how procedure was performed.	Category 2 - Must perform 2
Finger/thumb	T-spine
Hand	C-spine
Wrist	L-spine
Forearm	Category 3 - must perform 2
Elbow	BE
Humerus	Small Bowel
Clavicle	BA swallow or UGI or BE
Foot	OR – C-arm ortho 2 view
Standing foot	Category 4 - Must perform all
Ankle	Pediatric Chest (age; 0-3 not a portable)
Standing Ankle	Adult Portable chest
Leg	Geriatric Chest (65 years or older not a portable)
Heel	Category 5 – Must perform 2
Knee	Chest
Shoulder	Wheelchair/stretcher AP and Lateral
Femur	Acute Abdomen
Pelvis or Hip	Ribs
Standing Knee	Decubitus chest

CLINICAL GOALS

AFFECTIVE DOMAIN

Students should achieve the following goals:

- 1. Apply and relate theory to clinical activities.
- 2. Accept directions quickly and accurately.
- 3. Demonstrate thoroughness, accuracy, attention and dependability.
- 4. Utilize time efficiently and perform consistently; be self-directed.
- 5. Maintain complete, accurate and concise records in accordance with institutional and clinical policy and procedures.
- 6. Demonstrate competence and resourcefulness in utilization of equipment and supplies.
- 7. Respond to common stresses experienced in the clinical setting.
- 8. Demonstrate conflict prevention and resolution behaviors and techniques in the work setting.
- Demonstrate the ability to handle difficult people and work situations, such as an angry patient, using behaviors and techniques that diffuse or solve the problem, or prevent the situation from worsening.
- 10. Perform 2 or more tasks simultaneously when training and skill level have reached an appropriate level.
- 11. Recognize problems in the clinical setting and demonstrate a rational, step wise process to analyze and attempt to solve the problem.

CLINICAL PROFESSIONAL OBJECTIVES

The student should be able to:

- 1. Exhibit concern for the dignity and welfare of patients and family members.
- 2. Ensure confidence of privileged information.
- 3. Acknowledge limitations of practice and responsibility.
- 4. Maintain forthright and honest behavior at all times.
- 5. Communicate readily with patients, family members, and staff.
- 6. Demonstrate courteous, friendly, tactful and positive response to others.
- 7. Exhibit enthusiasm and initiative in performing assigned tasks.
- 8. Exhibit professional responsibility for actions.
- 9. Collaborate with supervisors and instructors to maximize learning and implement optimum patient care.
- 11. Demonstrate professional behaviors including showing openness to learning; showing confidence as clinical skills are mastered, and maintaining personal hygiene and a professional appearance.

RADIOGRAPHIC COMPETENCY OBJECTIVES

The student should be able to:

- 1. Prepare the room for the procedure:
 - a. Prepare radiographic table.
 - b. Obtain necessary equipment and accessories to perform set up.
 - c. Review requisition before getting the patient.
 - d. Use proper hand hygiene
- 2. Greet and assist correct patient:
 - a. Confirm patient's identity using 2 patient identifiers
 - b. Introduces self by name.
 - c. Assists and/or supports patient to or from wheelchair, stretcher, bed, etc.
 - d. Escort patient to and/or from dressing rooms, x-ray room, and/or waiting areas.
 - e. Inform patient of procedure to be performed.
 - f. Obtain consent for a procedure from a patient or the appropriate person as required and/or allowed by regulation and/or facility policy.
- 3. Explain procedure and confirm patient understands:
 - a. Inform patient of procedure to be performed.
 - b. Explain procedure in terms patient can understand.
 - c. Asks patient if they have any questions.
 - d. Provide answers which are accurate and appropriate to patient's level of understanding.
 - e. Explain importance of patient cooperation.

All students must train under direct supervision until competence is proven, then under indirect supervision. EXCEPTION – all operating room procedures (OR) must train under direct supervision.

ORTHOPEDIC RADIOGRAPHY (Includes Ortho at GMH, Asa Yancy, Ponce De Leon, Kirkwood, East Point, Camp Creek, Brookhaven, CHOA, Piedmont West, Kaiser Permanente, Peachtree Orthopedics, and EUHM) An acceptable level of competence has been attained when the student is able to:

Junior Level

- Perform patient handling tasks specific to area
 - a. patient identification (use 2 patient identifiers)
 - b. proper hand washing or use foam (before and after procedure)
 - c. proper gowning, patient lifting technique, cleaning the room before and after the procedure and proper instructions to the patient.
- 2. Set up radiographic equipment correctly for specific exams.
- 3. Provide radiation protection for patient and personnel.
- 4. Perform routine radiographic examinations for the appendicular and axial skeletons and abdomen with limited supervision.
 - a. Know routine studies.
 - b. Correctly manipulate equipment.
 - c. Correctly position part.
 - d. Use correct centering of central ray.
 - e. Select correct exposure factors.
 - f. Give correct breathing instructions to the patient.
 - g. Orientate image correctly and send to PACS, track patient correctly
- 5. Provide positive identification of image (markers, patient name, hospital number, date of exam), and of patient (asked patient name and/or checked armband).
- 6. Proceed efficiently with reasonable speed.
- 7. Describe fleshy and bony landmarks that aid in centering for a designated structure.
- 8. Name, locate, and describe the bones of the appendicular and axial skeletons.

Senior Level

- 9. Evaluate requisition and determine correct exam and views.
- 10. Describe the standard radiographic unit as to its application to general orthopedic radiography.
- 11. Perform the more intricate orthopedic exams with limited supervision.
- 11. Show proficiency in correct positioning, centering, SID, collimation and exposure factors.
- 13. Evaluate the quality of images
- 14. Select and use accessory items (such as grids, cassette holders, C/T hip apparatus, immobilization devices, etc.) when appropriate.
- 15. Correctly set up machine according to change in examination.

Junior students must train under direct supervision until competence is proven, then under limited supervision.

Senior students train under indirect supervision on procedures in which they have proven competence.

PORTABLE RADIOGRAPHY (Grady, CHOA, Kaiser Permanente, and EUHM)

An acceptable level of competence has been attained when the student is able to:

Junior Level

- 1. Perform patient handling tasks specific to area
 - a. patient identification (use 2 patient identifiers)
 - b. proper hand washing or use foam (before and after procedure)
 - c. proper gowning, patient lifting technique, cleaning the room before and after the procedure and proper instructions to the patient.
- 2. Set up radiographic equipment correctly for specific exams.
- 3. Provide radiation protection for patient and personnel.
- 4. Perform routine radiographic examinations for the appendicular and axial skeletons and abdomen with limited supervision.
 - a. Know routine studies.
 - b. Correctly manipulate equipment.
 - c. Correctly position part.
 - d. Use correct centering of central ray.
 - e. Select correct exposure factors.
 - f. Give correct breathing instructions to the patient.
 - g. Orientate image correctly and send to PACS, track patient correctly
- 5. Provide positive identification of image (markers, patient name, hospital number, date of exam), and of patient (asked patient name and/or checked armband).
- 6. Proceed efficiently with reasonable speed.
- 7. Describe fleshy and bony landmarks that aid in centering for a designated structure.
- 8. Name, locate, and describe the thoracic and abdominal structures and bones of the appendicular and axial skeletons.

Senior Level

- 9. Evaluate requisition and determine correct exam and views.
- 10. Describe the purpose and application of the portable unit used in bedside radiography.
- 11. Perform the more intricate portable procedures (isolation patients, recovery room, etc.) and orthopedic bedside radiographic exams with limited supervision.
- 11. Show proficiency in correct positioning, centering, SID, collimation and exposure factors.
- 13. Evaluate the quality of images
- 14. Select and use accessory items (such as mobile table for decubitus, contrast media for cardiac series, etc.) when appropriate.
- 15. Correctly set up machine according to change in examination.

All students must train under direct supervision.

<u>PEDIATRIC RADIOGRAPHY</u> (Grady, Children's Healthcare of Atlanta, Peachtree Orthopedics, and Kaiser Permanente) Day, Evening and Weekend Duty

An acceptable level of competence has been attained when the student is able to:

Junior Level

- Perform patient handling tasks specific to area
 - a. patient identification (use 2 patient identifiers)
 - b. proper hand washing or use foam (before and after procedure)
 - c. proper gowning, patient lifting technique, cleaning the room before and after the procedure and proper instructions to the patient and parent.
- 2. Set up fluoroscopic and radiographic equipment correctly for specific exams.
- 3. Provide radiation protection for patient, parent, and personnel.
- 4. Perform routine radiographic examinations with limited supervision.
 - a. Know routine studies.
 - b. Correctly manipulate equipment.
 - c. Correctly position part.
 - d. Use correct centering of central ray.
 - e. Select correct exposure factors.
 - f. Give correct breathing instructions to the patient.
 - g. Orientate image correctly and send to PACS, track patient correctly
- 5. Assist the radiologist with fluoroscopic studies.
- 6. Make images with the portable unit as required
- 7. Provide positive identification of image (markers, patient name, hospital number, date of exam), and of patient (asked patient name and/or checked armband).
- 8. Proceed efficiently with reasonable speed.
- 9. Describe fleshy and bony landmarks that aid in centering for a designated structure.
- 10. Name, locate, and describe the thoracic structures.

Senior Level

- 11. Evaluate requisition and determine correct exam and views.
- 12. Describe the purpose and application of the fluoroscopic unit and the standard radiographic unit as to its application to pediatric radiography.
- 13. Perform the more intricate chest exams with limited supervision.
- 14. Show proficiency in correct positioning, centering, SID, collimation and exposure factors.
- 15. Evaluate the quality of images
- 16. Select and use accessory items (such as grids, contrast media, sterile trays, catheters, immobilization devices, etc.) when appropriate.
- 17. Correctly set up machine according to change in examination.

STUDENTS ARE NOT ALLOWED TO HOLD A PATIENT DURING A RADIOGRAPHIC EXAM.

Junior students must train under direct supervision until competence is proven, then under limited supervision.

Senior students train under indirect supervision on procedures in which they have proven competence.

EMERGENCY RADIOGRAPHY - Grady, CHOA, Kaiser Permanente, and EUHM

An acceptable level of competence has been attained when the student is able to:

Junior Level

- 1. Perform patient handling tasks specific to area
 - a. patient identification (use 2 patient identifiers)
 - b. proper hand washing or use foam (before and after procedure)
 - c. proper gowning, patient lifting technique, cleaning the room before and after the procedure and proper instructions to the patient.
- 2. Set up radiographic equipment correctly for specific exams and choose the most appropriate area in which to radiograph the patient, based on his condition and ability to cooperate
- 3. Provide radiation protection for patient and personnel.
- 4. Perform routine emergency radiographic examinations with limited supervision.
 - a. Know routine studies. Vary the routine depending on the patient's condition.
 - b. Correctly manipulate equipment.
 - c. Correctly position part.
 - d. Use correct centering of central ray.
 - e. Select correct exposure factors.
 - f. Give correct breathing instructions to the patient.
 - g. Plan imaging sequence so that the patient is moved as little as possible.
 - h. Orientate image correctly and send to PACS, track patient correctly
- 5. Provide positive identification of image (markers, patient name, hospital number, date of exam), and of patient (asked patient name and/or checked armband).
- 6. Proceed efficiently with reasonable speed.
- 7. Provide first-aid care as needed. Assess patient condition on a regular basis.
- 8. Name, locate, and describe the bones of the appendicular and axial skeletons.

Senior Level

- 9. Evaluate requisition and determine correct exam and views.
- 10. Describe the standard radiographic unit as to its application to emergency radiography.
- 11. Perform the more intricate exams with limited supervision.
- 11. Show proficiency in correct positioning, centering, SID, collimation and exposure factors.
- 13. Evaluate the quality of images
- 14. Select and use accessory items (such as grids, cassette holders, C/T hip apparatus, immobilization devices, etc.) when appropriate.
- 15. Correctly set up machine according to change in examination.

Evening Rotation

The purpose of assigning the student to the Evening shift is to provide them with experiences that are not usually available during the regular working day in the Radiology Department. These may include many emergency procedures, such accident victims, gunshot and other injuries that occur more often in the Evening shifts.

Junior students must train under direct supervision until competence is proven, then under limited supervision.

Senior students train under indirect supervision on procedures in which they have proven competence.

UPPER & LOWER GASTROINTESTINAL FLUOROSCOPIC RADIOGRAPHY (Grady, Kaiser Permanente, and

CHOA at Hughes Spalding)

An acceptable level of competence has been attained when the student is able to:

Junior Level

- 1. Identify the contrast medium appropriate for the radiographic study.
- 2. Perform patient handling tasks specific to area
 - a. patient identification (use 2 patient identifiers)
 - b. proper hand washing or use foam (before and after procedure0
 - c. proper gowning, patient lifting technique, cleaning the room before and after the procedure and proper instructions to the patient.
- 3. Set up fluoro equipment correctly for specific exams.
- 4. Provide radiation protection for patient and personnel.
- 5. Assist the radiologist in administering the contrast medium when requested.
- 6. Perform routine GI after study examinations with limited supervision only when requested.
 - a. Know routine studies.
 - b. Collimate to area radiographed.
 - d. Correctly position part.
 - e. Use correct SID.
 - f. Use correct direction and centering of central ray.
 - g. Select correct exposure factors.
 - h. Give correct breathing instructions to the patient.
 - i. Orientate image correctly and send to PACS, track patient correctly
- 7. Provide positive identification of image (markers, patient name, hospital number, date of exam), and of patient (asked patient name and/or checked armband).
- 8. Proceed efficiently with reasonable speed.
- 9. Name, locate, and describe the pharynx, esophagus, stomach, and small bowel.

Senior Level

- 10. Evaluate requisition and determine correct exam and views.
- 11. Describe the purpose and application of the fluoroscopic unit used in an upper GI study.
- 12. Perform the more intricate studies (arthrography, double contrast studies, barium burger, solography, ERCP, pulmonary studies, etc.) when appropriate with limited supervision.
- 13. Show proficiency in correct positioning, centering, SID, collimation and exposure factors.
- 14. Gives patient follow-up instructions when necessary.
- 15. Evaluate the quality of images
- 16. Select and use accessory items (such as grids, cannulas, sterile trays, catheters, etc.) when appropriate.
- 17. Correctly set up machine according to change in examination.

Junior students must train under direct supervision until competence is proven, then under limited supervision.

Senior students train under indirect supervision on procedures in which they have proven competence.

OPERATING ROOM RADIOGRAPHY (Grady)

An acceptable level of competence has been attained when the student is able to:

Junior Level

- 1. Perform patient handling tasks specific to area (hand hygiene, patient identification, cleaning the machine and cassettes after each procedure, etc.).
- 2. Set up radiographic equipment correctly for specific exams.
- 3. Provide radiation protection for patient and personnel.
- 4. Maintain sterile technique.
- 5. Perform routine radiographic examinations with limited supervision.
 - a. Know routine studies.
 - b. Correctly manipulate equipment.
 - c. Correctly position patient or part.
 - d. Use correct centering of central ray.
 - e. Select correct exposure factors.
 - f. Give correct breathing instructions to the patient.
 - g. Orientate image correctly and send to PACS, track patient correctly
- 6. Provide positive identification of image (markers, patient name, hospital number, date and time of exam), and of patient.
- 7. Proceed efficiently with reasonable speed.
- 8. Name, locate, and describe the thoracic and abdominal structures and bones of the appendicular and axial skeletons.

Senior Level

- 9. Evaluate requisition and determine correct exam and views.
- 10 Describe the purpose and application of the portable and C-arm units used in OR radiography.
- 11. Perform the more intricate OR procedures with limited supervision.
- 12. Show proficiency in correct positioning, centering, SID, collimation, exposure factors, and sterile technique.
- 13. Evaluate the quality of images
- 14. Select and use accessory items (grids, etc.) when appropriate.
- 15. Correctly set up machine according to change in examination.

All students must train under direct supervision.

CT, RADIATION THERAPY, NUCLEAR MEDICINE, POSITRON EMISSION TOMOGRAPHY, SPECIAL PROCEDURES/NURSING CARE, CARDIAC CATHETERIZATION, NEUROSCIENCE CENTER, AND MAMMOGRAPHY

An acceptable level of competence has been attained when the student is able to:

- 1. Properly evaluate the requisition, identify the patient and demonstrate proper patient care in preparing the patient for the exam.
 - a. patient identification (use 2 patient identifiers)
 - b. proper hand washing or use foam (before and after procedure0
 - c. proper gowning, patient lifting technique, cleaning the room before and after the procedure and proper instructions to the patient.
- 2. Follow proper procedures to maintain the room in a clean, tidy, and well supplied manner.
- 3. Demonstrate basic knowledge of studies.
- 4. Demonstrate knowledge of the flow of work and preparation of the patient for various procedures.
- 5. Become familiar with basic IV set ups and precautions for injection of contrast media and/or radioisotopes.
- 6. Use proper accessories and techniques to demonstrate radiation protection to the patient and technologist.
- 7. Observe and participate to the level of their ability, under direct supervision, in this area.

ULTRASOUND

An acceptable level of competence has been attained when the student is able to:

- 1. Properly evaluate the requisition, identify the patient, and demonstrate proper patient care in preparing the patient for the exam.
 - a. patient identification (use 2 patient identifiers)
 - b. proper hand washing or use foam (before and after procedure)
 - c. proper gowning, patient lifting technique, cleaning the room before and after the procedure and proper instructions to the patient.
- 2. Follow proper procedures to maintain the room in a clean tidy, and well supplied manner.
- 3. Assist in recording scans on the image.
- 4. Learn to identify normal anatomical structures demonstrated by sonography.
- 5. Observe and participate to the level of their ability, under direct supervision, in this area

MAGNETIC RESONANCE IMAGING

An acceptable level of competence has been attained when the student is able to:

- 1. Properly evaluate the requisition, identify the patient and demonstrate proper patient care in preparing the patient for the exam.
 - a. patient identification (use 2 patient identifiers)
 - b. proper hand washing or use foam (before and after procedure)
 - c. proper gowning, patient lifting technique, cleaning the room before and after the procedure and proper instructions to the patient.
- 2. Follow proper procedures to maintain the room in a clean, tidy, and well supplied manner.
- 3. Demonstrate basic knowledge of MRI studies.
- 4. Demonstrate knowledge of the flow of work and preparation of the patient for various MRI studies.
- 5. Become familiar with basic IV set ups and precautions for injections.
- 6. Use proper accessories and techniques to demonstrate safety for the patient and technologist in MRI
- 7. Observe and participate to the level of their ability, under direct supervision, in this area.