The Clinical Handbook is reviewed annually by the Advisory Committee of Emory University’s Medical Imaging Program. The current committee members are:

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SECTION I: GLOSSARY

Clinical Education .................... The portion of the educational program conducted in a health care facility that provides the opportunity for students to translate theoretical and practical knowledge into cognitive, psychomotor and affective skills necessary for patient care. It consists of two clinical clerkships, three clinical internships and three clinical practicum courses.

Clinical Notebook ……………. A notebook containing clinical policies, information and forms. The clinical notebook is kept with the student at the clinical site and is used to organize certain paperwork for the semester. The notebook is turned into the Clinical Coordinator as instructed and may be part of the assignment grade.

Clinical Organization……….. The ability of the student to document their clinical records and review those records. The clinical grade is affected by the students clinical organizational skills.

Clinical Participation………… A series of eight (8) clinical education courses designed to rotate the student through all routine diagnostic areas in a clinical affiliation to develop performance skills.

Clinical Quiz ……………… A quiz given over policy and various radiographic topics. These quizzes are available on line, the honor code applies.

Competency Evaluation........... The procedure by which a student's performance is evaluated according to the program's prescribed standards. Competency evaluation consists of the knowledge, skills and affective behavior required of an entry-level radiographer.

Direct Supervision ............... Until a student achieves and documents competency in any given procedure, all clinical assignments shall be carried out under the direct supervision of qualified radiographers. The parameters of direct supervision are:
1. A radiographer reviews the request for examination in relation to the student's achievement;
2. A radiographer evaluates the condition of the patient in relation to the student's knowledge;
3. A radiographer is present in the room during the conduct of the exam;
4. A radiographer reviews and approves the images.
5. A radiographer must be present in the room during ANY repeated image. This includes exams the student has already proven competency in.

e*Value…………………….. The programs online clinical record keeping system.  www.e-value.net
Final Clinical Grade ............... The final grade received in clinical. The clinical grade includes an assignment and work ethic grade. It incorporates such qualities as knowledge of discipline, organizational and technical skills, dependability and reliability, industriousness and initiative, rapport with patients and co-workers, professionalism, etc.

Final Competency Evaluation .......... A reassessment of previously obtained competency. It occurs in the last two semesters.

Grand Rounds..................... Morning conferences for the radiology department; covering a variety of imaging topics. Students should attend as directed on their syllabi.

Honor Code ......................... A pledge by the student to do their own work on all clinical assignments, quizzes, etc. The student also pledges not to falsify records. Breaking the honor code has serious consequences including suspension and expulsion.

Image Critique ...................... An oral review of anatomy, positioning, technique etc. on images produced by the student. These critiques are done during the junior and senior years with the faculty members. Sophomore students observe junior and/or senior film critiques. Requirements are outlined in the clinical syllabi.

Indirect Supervision ................. A registered radiographer (R.T.ART) is in the vicinity of the radiographic area and is available for immediate assistance to the student. For Mobile Radiography, the immediate area is defined as the same floor and wing of the hospital or in the surgery suite.

Interprofessional Training ............... Group training with students from different healthcare professions. Supplemented most semesters by a clinical assignment.

Interval Checks ..................... An evaluation on previous semester competencies. An unsatisfactory Interval Check will require individualized remedial work until the examination in question can be performed satisfactorily. Interval checks are recorded in e*Value under PxDx.

Laboratory ......................... A separate work area for student practice. It includes phantoms, a radiographic table, overhead tube, and accessories.

Laboratory Practice ................. The practice of proper positioning methods utilizing role-playing activities with another student, following the appropriate instruction. Exposures are never taken on fellow students.

Lunch and Learn ..................... Lunch time sessions in which students present exams they have performed to the class and discuss positioning, technique, anatomy, etc.

No Call No Show (NCNS) ....... Failing to contact the clinical site or the clinical coordinator when the student will be absent from clinical. Students must contact the appropriate personnel prior to the start of the scheduled shift to avoid grade deductions. Each NCNS results in a letter grade deduction of the clinical grade.
Performance Objectives........ Objectives to be achieved each semester that focus on the actual performance of certain duties. The staff technologists, clinical instructors, and faculty will monitor the successful completion of these objectives. Checklists covering these objectives are on e*Value.

Practicum..................... The last year of clinical and that portion of clinical education in the student’s minor track. MRI, CT, IR, Women’s Health, Education or Management.

Prerequisite ................... The required number of exams done prior to the performance of a competency. These exams are performed by the student under direct supervision. The number of prerequisites varies by exam type. All images must be marked correctly with the student’s initialed markers. Exception: Egleston (no initials)

Px Dx.......................... A part of e*Value where students document exams, repeats vital signs, etc.

Radiographic Examination....... A series of images produced with medical imaging techniques to demonstrate anatomical structures.

Recommended Additional Clinical Time... A recommendation by the faculty or clinical personnel that the student participate in additional clinical time to improve their skills.

Record Keeping................ The accurate completion and organization of clinical documentation in e*Value and the clinical notebook.

Remedial Education ............ The portion of the educational program where the student obtains additional instruction, practice and reevaluation.

Repeat Exams .................. An image that must be repeated due to technique, positioning, centering, artifacts, etc. Any repeated image must be completed under direct supervision for all students and documented in e*Value under PxDx.

Seminars ...................... Lectures given for continuing education to registered technologists. Seminars are used to familiarize the student with continuing education requirements of the registered technologist.

Simulation ...................... An examination on a live subject (not a patient) with a simulated exposure.

Student Clinical Evaluations.... Evaluations completed by the technologists and/or faculty with whom the student worked. The student’s performance and affective behavior are evaluated. It is the student’s responsibility to be sure their evaluations have been completed on e*Value by the Clinical Instructor/Supervisor.

Student Evaluation of Clinical... Ongoing online evaluations of the clinical areas by students in the program. They provide students an avenue to provide input regarding their rotations so program faculty can evaluate the educational integrity of the areas. These evaluations are assessed by the clinical coordinator and shared with the program faculty and radiology
administrators/supervisors of the clinical sites. Positive comments are often shared with the clinical sites. These are completed on e*Value.

Symplr..........................Children’s Healthcare of Atlanta credentialing company.

Time Tracking....................The procedure used to document clinical experience on e*Value. Students must document their time each clinical day and are responsible for ensuring it is correct and validate by the appropriate personnel.

Work Ethic.........................An aspect of the final clinical grade that takes into consideration the student’s attendance, tardiness and compliance to dress code policies, etc.

Written Clinical Assignments… Assignments that typically include study questions, case studies, and worksheets.
SECTION II: GENERAL INFORMATION

INTRODUCTION
Students enrolled in the Emory University Medical Imaging Program will be responsible for observing university rules and regulations as stated in the current and any subsequent university catalog and student handbook, in addition to those applicable to their clinical affiliation assignments. Clinical facilities are considered an integral part of the university campus for student clinical assignments.

The rules and regulations stated in this handbook represent a contractual agreement between Emory University and the Medical Imaging student for the duration of the program. Failure to comply with the rules and regulations in this handbook will affect student evaluations and grades and may result in dismissal from the Medical Imaging Program if the student shows no improvement or makes no attempt to correct errors after counseling. If rules and regulations change or are updated, the student will be notified in advance.

PURPOSE
The major goal of a program in Medical Imaging is to enable the student to develop skills that will allow him or her to perform the duties of a Radiologic Technologist successfully. The first step in this process is the acquisition of knowledge through classroom and laboratory learning experiences. It is then necessary to practice these skills until they are mastered.

During the first semester of clinical participation the student will attend various mandatory orientation sessions. Following these orientation sessions students will spend time observing the staff technologist at work and learning patient care skills, such as, communication, patient transportation, appropriate patient attire, etc.

Participation in the clinical area becomes increasingly more active, with the student assisting the staff technologist with radiographic procedures, then actually performing the procedure under direct supervision by the technologist. Finally, after proving competency the student will actually perform the procedures with only indirect supervision. All repeated images are performed under direct supervision.

COURSE SYLLABI
Each semester the student will have access to the Clinical Course Syllabus. The syllabus will contain the course description, objectives, requirements, assignments, etc. The Clinical Coordinator or designee will explain the syllabus at the beginning of each semester.

CLINICAL ASSIGNMENT
Students enrolled in the Emory University Medical Imaging Program will be scheduled and rotated through the various clinical assignments by the Clinical Coordinator in consultation and agreement with the clinical sites. These assignments are in accordance with the Master Plan of Clinical Education. The Master Plan is subject to change due to the addition, consolidation or deletion of clinical education settings but rotations will be as equitable as possible.

Your clinical assignment for the entire semester will be posted and you will be given a copy. The schedule is prepared so that there will be an orderly flow in the department, adequate supervision and an adequate and equal clinical education experience for the students. It is the student's responsibility to read and abide by all clinical assignment schedules. Failure to do so will affect the student’s personal time and demerits apply. Students may not attend additional clinical time without scheduling it through the clinical coordinator.

Students may be employed while enrolled in the Medical Imaging Program provided the work does not interfere with regular academic and clinical responsibilities. Due to the amount of time required to be
successful in the program it is recommended that the students not work more than twenty hours per week.

**PARKING**

Students must adhere to these parking requirements:

- Clifton Campus: Parking while at the Clifton Campus sites is through the Emory parking office.
- Emory John’s Creek – Students may park in E1 or behind the blue line in E2
- Egleston: Students may not park at the CHOA parking deck at Egleston; the deck is very congested. Students will use their regular Emory parking facilities.
- Wesley Woods: Students will park in the employee area at Wesley Woods.
- Executive Park: Students will park in the lot at the adjacent 57 building.
- EUH-Midtown: Students will park in the lot at the adjacent 57 building.
- Emory St. Joseph and Resurgens St. Joe: Students will sign out a deck card from Kim Cross and return it immediately upon completion of the rotation.

Any site not listed has general parking at the facility that the student may use as directed by the staff.

**ROUTINE DAY SHIFT CLINICAL HOURS**

Students will work these hours during a typical week: Most general clinical rotations will be scheduled Monday – Friday. Some Evening or weekend shifts may occur in the junior and senior year. Hours may vary slightly.

**1st SEMESTER: FALL**

- Two – clinical tours
- Eight; eight hour observations
- Two – forty hour weeks Monday – Friday

**2nd SEMESTER: SPRING**

- 16 hours/week (Days/Times to be announced)
  - 0730 – 1530, 0800 – 1600, 0830 – 1630 (*Times may vary slightly.*)

**3rd SEMESTER: SUMMER**

- 16 hours/week (Days/Times to be announced)
  - 0730 – 1530, 0800 – 1600, 0830 – 1630, 1300 – 2100 (*Times may vary slightly.*)
  - (*Evening rotations are possible*)

**4th SEMESTER: FALL**

- 16 hours/week (Days/Times to be announced)
  - 0730 – 1530, 0800 – 1600, 0830 – 1630, 1300 – 2100 (*Times may vary slightly.*)
  - (*Evening rotations are possible*)

**5th SEMESTER: SPRING**

- 16 hours/week (Days/Times to be announced) (*Evening rotations are possible*)

**6th SEMESTER: SUMMER**  
*Minor track weekend hours may be possible*

*16 hours/week – General Clinical (Days/Times to be announced)*

*8 hours/week – Minor Track Practicum (Days/Times to be announced)  
(*Evening rotations are possible*)
7th SEMESTER: FALL  Minor track weekend hours may be possible
*16 hours/week – General Clinical (Days/Times to be announced)
*8 – 12 hours/week – Minor Track Practicum (Days/Times to be announced)
(Evening rotations are possible)

8th SEMESTER: SPRING  Minor track weekend hours may be possible
*16 hours/week – General Clinical (Days/Times to be announced)
*12 – 16 hours/week – Minor Track Practicum (Days/Times to be announced)
(Evening rotations are possible)

*Practicums may be done as a block of time rather than 8-16 hours/week

HOLIDAYS
The Medical Imaging Program observes the following holidays:
- Martin Luther King's Birthday (1 day)
- Memorial Day (1 day)
- July 4th (1 day)
- Labor Day (1 day)
- Thanksgiving (2 days)

ATTENDANCE
Medical Imaging students will attend ALL Clinical Assignments as scheduled by the Clinical Faculty. Students will be required to clock in and out of all clinical assignments on e*Value in order to keep an accurate record of clinical attendance and clinical hours. Clock in and out times must reflect the actual time the student arrived and was ready to work. Clocking in on time when you actually arrive late or clocking out on time when you leave early, is considered a falsification of clinical records and is a serious offense. e*Value does track IP addresses. Students must be in their clinical area when they clock in.

Clinical instructors or supervisors in special modalities at the site must verify your attendance through e*Value. It is the student’s responsibility to check these records weekly to see that they have been validated. The clinical faculty member assigned to the site should be notified if there are problems.

In the event that a clinical instructor/supervisor is unavailable to sign the student in or out, students should call the clinical faculty member assigned to their site from a clinical site phone and leave a message. The voice mail system will record the time and location of the call. **DO NOT CALL FROM A CELL PHONE.** Once students are in their minor tracks they will call the instructor in charge of their minor track during those rotations.

When a student fails to follow the procedures for documenting clinical time; clinical time may be lost. See e*Value section on hour tracking policies.

Absences affect the quality of achievement in theory and practical applications. Excessive or unexcused absences will NOT be tolerated. Students that miss over 24 hours of general clinical time in a semester will be required to make up that time over the semester break as scheduled by the clinical coordinator. **Unless the clinical time missed is due to a documented extenuating circumstance, the clinical grade will be calculated based on the initial time missed.** Failure to comply with attendance policies will result in clinical probation and possible prevention of registration for the next clinical semester.

- **Absences:** If you will be absent, notify the clinical faculty member assigned to your site and the Clinical Instructor or Site Supervisor at your assigned clinical site prior to the scheduled shift to avoid a letter grade reduction. (phone numbers are located in the handbook) If you become ill
while at your clinical assignment or if you need to leave early for some other reason, you must notify the site supervisor and the clinical faculty member before you leave. Absences and failure to follow proper notification policies affect the final clinical grade as outlined in Section VII.

- **Tardiness:** If unavoidable circumstances will result in the student being more than thirty minutes late, please call the clinical faculty member and the supervisor or Clinical Instructor at the clinical site. The student should clock in at the actual time that they arrive. Excessive tardiness will not be tolerated. Tardiness affects the final clinical grade as outline in Section VII.
  - Students are expected to be ready to work at the start of the shift not just arriving to the area.
  - Students will be considered tardy any time they come in to clinical later than their normal scheduled time unless they have informed both the site and faculty before 3p the previous business day (M-F).
  - Students that fail to inform the clinical site and program within a reasonable amount of time that they will be more than 30 minutes late will receive a no call late (NCL) demerit.
  - Any time missed due to tardiness will be deducted from the student’s personal time in Semesters II – VIII.
  - Any time missed due to tardiness in Semester I must be made up.

- **Lunch:** Lunch schedules will be assigned at the discretion of the clinical supervisor when students are on clinical assignments. Lunch breaks are limited to 45 minutes during full day shifts. There are no lunch breaks during part day rotations. No make-up time is allowed during lunch breaks; students may not forego their lunch in order to leave early. **Students should eat breakfast prior to starting day shifts.**

- **Extended absences:** Any extended absence greater than one week will require written confirmation from a physician of ability to return to full clinical duties. Extended absences due to severe illness, injury or family emergency will be looked at on an individual basis by the Program faculty and or Progress and Promotions Committee, to determine if grade penalties will be incurred or if make up time will be allowed. In the event of an extended absence it may be necessary to make up missed clinical time. Insufficient clinical hours will result in receiving a grade of "Incomplete" for that semester. The "Incomplete" cannot be changed until all clinical hours are completed. If the incomplete is not removed prior to the start of the next semester the student will not be allowed to register for the next clinical course. Extraordinary circumstances will be reviewed on a case-by-case basis.

- **Full performance of duties:** Students must be able to perform all activities required to be a full functioning radiographer. Therefore, if an illness, injury, condition, etc. prevents the student from performing the required activities, including but not limited to lifting, pushing, pulling, etc., the student may not attend clinical. In order to return to clinical a full release from the student’s doctor is required.

- **Semester break clinical time:** In order to complete required competencies students will be allowed to attend extra clinical during finals week or the first week of the semester break at the discretion of the program faculty and clinical affiliate. Proper supervision must be available; all clinical policies must be adhered to. This will only be allowed once during the program; after that the time is volunteer time and any applicable assignments will be applied to the next semester. Going to a clinical site without the Clinical Coordinator’s (or designee) approval is a supervision violation and will result in a reprimand and no credit for time, assignments or exams completed.
• **Make up time:** Occasionally students will be allowed to make up time missed due to a documented extended illness or extenuating circumstance such as a funeral, jury duty, acute illness, etc. The student must request make up time in writing and provide documentation. This make up time may only be done over semester breaks and/or at the discretion of the clinical coordinator and clinical affiliate. All clinical policies apply. Make up time due to these extenuating circumstances will be applied towards the clinical grade. Going to a clinical site without the Clinical Coordinator’s (or designee) approval is a supervision violation and will result in a reprimand and no credit for time, assignments or exams completed.

• **Volunteer clinical time:** Students are allowed to volunteer at clinical sites on their own time to gain more experience or to gain exposure to different modalities. Students must first get approval from the clinical coordinator, who will in turn contact the clinical site for their approval and to ensure proper supervision will be available. Volunteer clinical time will not be approved if it conflicts with other scheduled student rotations or proper supervision is not available. All clinical policies apply. Exams done during volunteer time over the semester breaks will be applied to the semester that follows. Failure to attend the scheduled time without an acceptable excuse will lead to forfeiture of future opportunities. Going to a clinical site without the Clinical Coordinator’s (or designee) approval is a supervision violation and will result in a reprimand and no credit for time, assignments or exams completed.

• **Recommended Additional Clinical Time:** In the event that a faculty member or a clinical instructor feels that a student would benefit from participating in more clinical time, a memo/email will be sent to the program and/or student stating the reason for the additional time. The student may or may not agree with the recommendation; however, students should understand that the additional time recommendation is done for their own benefit. Choosing not to take advantage of the recommendation may be an indication of the student’s desire to be successful. All clinical policies will apply.

• **Religious observances:** The program recognizes that some students may have special needs in the scheduling of clinical duties because of religious beliefs and practices. Therefore students who anticipate conflicts with regularly scheduled clinical rotations must notify the Clinical Coordinator in writing at least 15 calendar days in advance of the conflicting date. The student will be able to make up the clinical time during the semester break or at the discretion of the Clinical Coordinator. The student and Clinical Coordinator will work together to schedule the make-up time. All policies apply.

**SYMPLR**
Students will be required to use the “Symplr” credentialing system for rotations at Children’s Healthcare of Atlanta (CHOA). Students will receive an e-mail from Symplr and will follow their instructions to be cleared to rotate through the CHOA sites. The student will need to upload documentation and must submit to a background check and a drug screen at their own expense. Students may not attend any CHOA rotation until they get a “green light” from Symplr.

Failure to pass their requirements will prevent the student from attending the rotation. All attendance policies will apply.
**PHONE LIST**

**Program Office** | **Phone #’s** | **PIC #’s or Cells**
---|---|---
Main: Candice McLean | 404-712-1160 | N/A
Tammy Putnal | 404-712-0241 | N/A
Dawn Moore: | 404-727-3200 | N/A
Barbara Peck: | 404-712-7823 | 14077*
Ted Brzinski | 404-712-1229 | 15887*
Kim Cross | 404-712-0294 | 404-944-2313
Lamiis Khalifa | 404-712-1228 | 26612*
**TBA** | 404-712-2167 | N/A
**INClement Weather Line:** | 404-727-1234 | 

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**Children’s Healthcare of Atlanta at Egleston**

Supervisor: 404-785-1286*
2nd shift supervisor 404-785-1291
Fluoroscopy: 404-785-6168
Routines: 404-785-1255
CT: 404-785-6031
MRI: 404-785-1487
Education Coordinator: 404-785-1480

**TO CALL A CODE 5-6161**

**Children’s Healthcare of Atlanta at Scottish Rite**

MRI: 404-785-2485
MRI Supervisor: 404-785-5356
Education Coordinator: 404-785-1480

**TO CALL A CODE 5-6161**

**Children’s Healthcare of Atlanta at Webb Bridge**

Main: 404-785-7226
MRI: 404-785-8156

**TO CALL A CODE 9-911**

**Emory University Hospital – Midtown**

Control: 404-686-2326
CT: 404-686-8983
Interventional: 404-686-2323
Med Office Tower (MOT) 404-686-3194(3259)
MRI: 404-686-3360
Nuclear Medicine: 404-686-1225
RT Oncology: 404-686-7857
Ultrasonography: 404-686-8990(1503)

**TO CALL A CODE 6-1777**

**Emory Johns Creek**

General 678-474-8071 (7166, 7167)
Breast Imaging 678-474-5602
CT 678-474-8070 (7169)
IR 678-474-8055
MRI 678-474-8173
Nuclear Medicine 678-474-8172
US 678-474-8069
Manager 678-474-7157
Supervisor 678-474-8045

**TO CALL A CODE 4444**

**Emory St. Joseph’s Hospital**

General 678-843-5529 (5530)
CT 678-843-7574 press 3
IR 678-843-7332
MRI 678-843-5149
Supervisor 678-843-4898
OPIC 678-843-6132 (6133)

**TO CALL A CODE 3-5555**

**Emory University Hospital**

Diagnostic Front Desk 404-712-7036
Control: 404-712-7832
Fluoroscopy: 404-712-7953
CT Supervisor: 404-712-4612
CT Main: 404-712-7888
Cardiovascular Lab: 404-712-7034
Interventional: 404-712-0532
MRI: 404-712-1390
Nuclear Medicine: Front Desk 404-712-1075
Main Work Hall: 404-712-5017
Ultrasonography: 404-712-7428

**TO CALL A CODE 2-1777**

**Emory University Orthopaedic & Spine Hospital**

Technologists: 404-251-3094

**TO CALL A CODE 1-3777**

**Resurgens Orthopaedics**

Covington: 678-625-5335
Lawrenceville: 678-985-7135
McDonough 770-506-4119 x 56535
Roswell: 770-360-0406
St. Joe: 404-531-8451

**TO CALL A CODE 911**

**The Emory Clinics A & C (Winship)**

Diagnostic: 404-778-3596(5112)
Mammography: 404-778-3887
Bone Density: 404-778-3441
CT: 404-778-4714
CT Supervisor: 404-778-4810
CT: Bldg. A 404-778-4591
MRI: 404-778-3176 (5622)
PET 404-778-5748
Cardiac PET: Bldg. A 404-778-4748
Rad. Oncology: 404-778-4078 (5621)
Rad. Oncology: 404-778-3450 (5095)
Rad. Oncology Supervisor 404-778-5315
Ultrasonography: 404-778-3522

**TO CALL A CODE 8-8888**

**The Emory Clinic Satellites**

Executive Park 50th
2nd floor ortho: 404-778-6256
3rd floor spine: 404-778-7100 (6261)
4th floor: 404-778-6278 (7209)
5th floor OR: 404-778-6200 (6220)
Supervisor: 404-778-6298
Executive Park 12th
404-778-6090
EUHM – McDonough 404-778-7270

**TO CALL A CODE 9-911**

1525 Building: 404-778-2761
**TO CALL A CODE 8-8888**
DRESS CODE
The personal appearance and demeanor of Medical Imaging Students at Emory University reflect both the University and Program Standards and are indicative of the student's interest and pride in the profession. The appropriate uniform, as described below, must be worn while on the clinical assignment.

Failure to comply with the dress code may result in the student being dismissed from the clinical setting until proper attire is worn. All clinical time missed due to noncompliance with the dress code will affect the attendance section of the work ethic grade. After one warning, each dress code violation will affect the work ethic grade.

It is also important to give a favorable impression to patients, physicians, and visitors while walking through the clinical sites before or after your shift or when in the department to do assignments, pick up images, etc. Therefore inappropriate attire, such as shorts, blue jeans, midriffs, tank tops, tee shirts with slogans, sandals, etc. should be avoided. Review the hospital and departmental dress code in the back of this section for further clarification.

- Uniforms
  General Clinical Rotations:
  Black scrub uniform with required embroidery, short white lab coat/jacket (sport coat length) with patch, black or white shoes, white or black socks/hose. Students may wear plain, (no logos) white or black undershirts or turtlenecks under their uniform tops. Students will wear EMORY tags on their uniforms supplied by program. Uniforms must be kept clean and pressed at all times. Faculty, clinical instructors and or supervisors reserve the right to deem uniforms inappropriate, send the student home and/or require different uniforms. Time missed affects the students personal time and or clinical grade.

  Scrub tops must be embroidered with the preapproved Emory Medical Imaging logos. Uniforms must be purchased through the Emory Bookstore.

  Lab coats are to be worn at ALL times when outside of the radiology department, except at Egleston when doing portables since white lab coats may intimidate the pediatric patient. Lab coats will not be worn in surgery suites. Students may remove their lab coat while performing procedures in the department, however they should keep it on as much as possible. Students will be supplied with one patch and the student will sew it onto the right sleeve of their lab coat as instructed by the faculty. Students can purchase additional patches at $5.00 each from the clinical coordinator.

  Surgery uniforms will be worn only during the surgery rotations as required by the clinical site. White lab coats or jackets should be worn over the scrubs when the student is not in the surgery suite. Surgical masks, bonnets, and booties are not to be worn outside of the required area. No student may wear or carry hospital purchased scrub attire away from the hospital complex.

  If a student is splashed with blood or body fluids, contact the department supervisor so a temporary set of scrubs can be issued. Be sure to inform the program faculty so a dress code violation is not given.

  Shoes should be polished and should be flat; white or black uniform shoes or tennis shoes are acceptable. Tennis shoes should be plain; they should not be adorned with colorful stripes etc. Socks and hose are required and should be in good shape. Open toed shoes are not permitted, clogs are permitted.
Clothes must be clean and pressed. Students that do not look professional will be sent home.

**Name Badge**
Students must identify themselves to patients and wear an identification name badge in *plain view* while on clinical assignment. Name Badges *cannot* be placed on a lanyard; appropriate holders include retractable badge holders or clip on holders. Students will be supplied with a class color Badge ID holder that they must wear at all clinical rotations. The Program provides name badges at the beginning of training but the student must purchase replacement badges. Absence of I.D. badges is considered a dress code violation. Students will also obtain a student badge from the education coordinator when at Egleston and return it upon completion of the rotation.

- **Radiation Badges**
The student must always wear two dosimeters while on clinical assignment. The collar dosimeter should be worn near the neck and outside of the fluoroscopy apron during fluoroscopy procedures. The body dosimeter is to be worn at the waist level along the midline of the body and under the fluoroscopy apron during fluoroscopy procedures. Dosimeters must be changed in the program office prior to the 8th working day of each month and must be turned in on time. Late submission will result in the student being assessed a $40.00 late fee. Students will remit this fee to the program. Students will review and initial their dosimetry reports when the reports are received from the radiation safety office.

- **Markers**
Students will use right and left initialed lead markers to properly identify anatomical references on radiographs. Before entering clinical, students will order at least **TWO** sets of R & L markers with their initials (first, middle, last). Students without middle initials should contact the Clinical Coordinator. The right marker must be RED, the left marker must be BLUE. Students should always have a spare set available in case a marker is lost or misplaced. The student must carry right and left markers during all diagnostic clinical rotations to avoid a dress code violation. All exams done by the student must be marked correctly with the student's initialed markers. (Egleston exception) Failure to correctly mark any competency, prerequisite or interval check film with the student’s initialed markers will lead to failure of the exam. Students may purchase markers from any company provided they meet the above criteria – resources will be given.

In addition, all portable neonate images at EUHM must **ALWAYS** be marked correctly with a lead marker. **Do not** leave the marker off at the neonate staff's insistence; the radiologist requires mandatory marking of all images.

**Emory Protocol for marking of images**
- All lateral images must be marked anteriorly using the marker of the side down.
  - Possible exception is Lateral chest – use department protocol.
- Markers on AP extremities should be placed laterally. (anatomically)
- Markers on PA extremities should be placed medially. (anatomically)
- All other projections should be marked on the correct side.

- **Technique Guide and Clinical Notebook**
The student must have the program mandated technique/procedure guide or IRadTech and their clinical notebook with them during **ALL** clinical rotations to avoid a dress code violation. It is also recommended that the student carry a small technique booklet in their pocket.
• **Hygiene**
For the health and well-being of all students, employees and patients, students are responsible for maintaining appropriate levels of personal hygiene. Clean clothing and hair, daily bathing, and the use of deodorants/antiperspirants is strongly recommended to maintain appropriate standards of cleanliness. Body odors will be addressed with individual students quickly and confidentially. Students may be sent home by the Faculty or Clinical Instructor to address the problem. Students may return once the issue is resolved. Time missed will be deducted from the student’s personal time (if applicable) unless a medical condition exists. Grade penalties apply.

• **Hairstyles**
Hairstyles must be simple and kept out of the eyes. Long hair must be worn in a fashion that will never touch the patient. Hair must be neatly groomed, clean and must be a natural human color. (e.g. black, blonde, brown, red, gray, white.) Extreme hairstyles and unnatural colors are not allowed. If a hair band, hair bow or turban must be worn, it must be kept simple and must be white. Beards and mustaches must be neatly trimmed.

• **Fingernails**
For sanitary purposes fingernails must be short, no longer than 1/4 inch and must be neatly trimmed and clean. Students may NOT wear any fingernail polish or false fingernails of any kind while in clinical. False fingernails are not acceptable when providing direct patient care, performing invasive procedures, or when preparing compounded or infusion solutions. There have been documented outbreaks of infections due to Pseudomonas, Serratia & Yeast due to artificial nails.

• **Cosmetics and Fragrances**
Cosmetics and fragrances may be used only in moderation. Fragrances are **not allowed** at Children’s Healthcare of Atlanta.

• **Jewelry**
For sanitary and safety purposes, jewelry must be kept to a minimum and must be inconspicuous. Earrings must be small and close to the ear lobes. Only two earrings/ear are allowed. Necklaces must be short and should never touch a patient. Only one ring may be worn on each hand. Body piercing that is visible to the customer such as tongue rings, eyebrow rings, nose rings, pierced fingernails etc. may not be worn while on clinical rotations. Ear gauges are not allowed.

• **Watches**
Students are required to wear a watch with a second hand while on their clinical assignment. They may not wear “Smart Watches”.

• **Smoking**
Smoking is prohibited inside all medical buildings. Smoking is NOT permitted at many of the campuses. Students that smell of smoke will be sent home by certain facilities. This will affect the student’s personal time, dress code, and their work ethic grade.

• **Tattoos**
All tattoos must be kept covered while on clinical rotations.

• **Cell phones and electronic devices**
Students may carry cell phones but they may **NOT** be turned on while at clinical. Students may only use the cell phones in the event of an emergency or while they are on break or at lunch provided they
are in a non-patient/non-workflow area. Cell phones may never be used in restricted areas. Students using cell phones during patient care activities will be reprimanded, given a dress code violation and may be suspended. Students may not take any pictures in the clinical affiliate with their electronic devices, doing so may result in immediate dismissal. Students that have “Smart” watches may only use them for the time function if they have a second hand, all other apps etc. must be turned off. If the device cannot be used in this way, the student may not wear it while in their clinical rotations.

In addition, the use of PDA phones, “smart-phones”, digital music devices, laptop computers, or other similar/comparable device used for communication or internet access (Treo, Blackberry, iPad, iPhone, iPod Touch, iPod, etc.) are not to be turned on or used while in the clinical setting. If the student wishes to use any of the devices listed or implied above during the scheduled lunch break, he/she must do so in an area away from patient care or departmental workflow areas. Departmental computers are only to be used to document clinical time or procedures and only after approval from the clinical instructor or supervisor.

**Exception:** Students may use their iPods/smart phones for clinical documentation. All sounds must be off. At all other times the devices must be off. These devices are part of the students uniform so must be with the student at each clinical day. Responding to e-mails, surfing etc. while using the devices for clinical documentation is NOT allowed.

- **Text Messaging, e-mail or social media**
  Students may NOT text message, use any social media websites (ex. Twitter, Facebook, Instagram, Snapchat, etc.) or e-mail while in clinical. Including e-mailing program faculty, staff or clinical sites/personnel.

- **Code Cards**
  Must be carried with the student during all clinical rotations. (Will be provided by program.)

- **CPR**
  All students must be current in American Heart Association Healthcare Provider BLS CPR. If a student certification lapses during the program they may not go to clinical until it is updated. All attendance penalties will apply.
SECTION III: PROFESSIONAL CONDUCT

The Emory University School of Medicine takes great pride in the development and accomplishments of its students and the practitioners it graduates. It is a combination of academic success and professional development that provides the cornerstone of a fine practitioner. To that end, various safeguards are in place to monitor and access the progress, performance and promotion of students. All conduct standards in the Medical Imaging Program Student Handbook and the SOM Handbook apply to all clinical courses. [https://med.emory.edu/handbook/](https://med.emory.edu/handbook/)

Professional conduct is expected from students at all times. Professionalism is an essential component of all clinical evaluations and is a primary factor of success considered by the Program Faculty. Also be aware that certain unprofessional behaviors could make the student ineligible to take the National Registry Exam. Students should review registry policies and the Standard of Ethics at [www.arrt.org](http://www.arrt.org) upon admission to the program.

EXPECTATIONS

*Emory University is an institution dedicated to providing educational opportunities for its students, transmitting and advancing knowledge, and providing a wide range of services to students and to the general community.* To accomplish these objectives and responsibilities requires that the University be free from violence, threats and intimidation; protective of free inquiry and dissent; respectful of the rights of others; open to change; supportive of democratic and lawful procedure; and dedicated to intellectual integrity and a rational approach to the resolution of human problems.

The tradition of the university as a sanctuary of academic freedom and center of informed discussion is an honored one, to be guarded vigilantly. The basic significance of that sanctuary lies in the protection of intellectual freedoms: the rights of professors to teach; of scholars to engage in the advancement of knowledge; of students to learn and express their views.

Health professionals are privileged to serve in important and time-honored roles as caregivers for other humans. These roles include physical and emotional dimensions that demand the highest degree of ethical behavior.

Ethical behavior includes, but is not in any way limited to honesty, maintaining confidentiality, trustworthiness, professional demeanor, respect for the rights of others, personal accountability, concern for the welfare of patients, and responsibility to duty:

- **Honesty** – Being truthful in communication with all others, while in the healthcare arena or in the community at large.

- **Maintenance of Patient Confidentiality** – Restricting discussion of patient care to those areas where conversations cannot be overheard by others outside of the care team; refraining from disclosing patient identity to those not connected to the care of the patient; maintaining appropriate security for all paper and electronic patient records, whether in the patient care or research realms.

- **Trustworthiness** – Being dependable; following through on responsibilities in a timely manner.

- **Professional Communication and Demeanor** – Being thoughtful and kind when interacting with patients, their families, other members of the healthcare team, and all others; maintaining civility in all relationships; striving to maintain composure under pressures of fatigue,
professional stress or personal problems; maintaining a neat and clean appearance and dress in
dress attire that is reasonable and accepted as professional to the circumstances; refraining from
into intoxication; abstaining from the illegal use of drugs (both prescription and illicit drugs).

- **Respect for the rights of others** – Dealing with all others, whether in a professional or non-
  professional setting, in a considerate manner and with a spirit of cooperation; respecting the rights
  of patients and their families to be informed and share in patient care decisions; respecting
  patients’ modesty and privacy.

- **Personal accountability** – Participating responsibly in patient care to the best of one’s ability and
  with appropriate supervision; undertaking clinical duties and persevering until they are complete;
  notifying the responsible person if one is unable to perform clinical tasks effectively; complying
  with University Policies and Procedures in an honest and forthright manner.

- **Concern for the welfare of patients** – Treating patients and their families with respect and
  dignity both in their presence and in discussions with others; avoiding the use of foul language,
  offensive gestures or inappropriate remarks; discerning accurately when supervision or advice is
  needed and seeking these out before acting; recognizing when one’s ability to function effectively
  is compromised and asking for relief or help; never administering care, in person or over the
  phone while under the influence of alcohol or other drugs (prescription or illegal); not engaging
  in romantic, sexual, or other nonprofessional relationships with a patient, even upon the apparent
  request of a patient; advocating for the best care of the patient, in context of that patient’s beliefs
  and desires.

- **Responsibility to duty** – Effectively undertaking duties with alacrity [eagerness, enthusiasm and
  promptness are synonyms] and persevering until complete, or notifying a responsible more senior
  person of a problem; punctual attendance for class, small groups, rounds, conferences and other duties;
  timely notification of supervisory faculty, residents and Deans of absences or an inability to carry
  out assigned duties; seeing patients regularly and assuming responsibility for their care with
  appropriate supervision; identifying emergencies and responding appropriately; and being
  available to faculty or staff personnel when on duty.

**EVALUATION OF PROFESSIONAL CONDUCT**

The medical school faculty of Emory University has established standards for determining the ethical
fitness of medical students to participate in the medical profession. The evaluation of professionalism,
separate to and as part of academic performance, is considered for all medical students during each and
every course and clerkship. The Standards of Professionalism are described in the Medical Imaging
Program Student Handbook. Some specific examples of professional conduct include:

i. **Concern for the welfare of patients** as evidenced by thoughtful and professional attitude in obtaining
  history and physical examinations; avoidance of foul language, offensive gestures or inappropriate
  remarks with sexual overtones; treatment of patients with respect and dignity both in their presence
  and in discussions with peers; manifestation of concern for the total patient.

ii. **Concern for the rights of others**, as shown by dealing with professional and staff personnel and with
  peer members of the health care team in a considerate manner and with a spirit of cooperation; acting
  with an egalitarian spirit towards all persons regardless of race, color, religion, sex, sexual orientation,
  national origin, veteran’s status, disability, or age; assuming an appropriate and equitable share of
  duties among peers.

iii. **Responsibility to duty**, which involves: effectively undertaking duties with alacrity [eagerness,
  enthusiasm and promptness are synonyms] and persevering until complete, or notifying a responsible
  more senior person of a problem; punctual attendance for class, small groups, rounds, conferences
and other clinical duties, or offering appropriate explanation when unable to be present; notifying the Dean’s Office, course directors, and/or supervising house officers of absence or inability to carry out duties; seeing patients regularly and assuming responsibility for their care with appropriate supervision; identifying emergencies and responding appropriately; and being available to faculty or staff personnel when on duty.

iv.) Trustworthiness, exhibited by being truthful and intellectually honest in communications with others; accepting responsibility for meeting multiple demands by establishing proper priorities and by completing work necessary for the optimal care of patients; discerning accurately when supervision or advice is needed before acting; maintaining confidentiality of information concerning patients.

v.) Professional demeanor, which means a neat and clean appearance in attire, that is reasonably acceptable as appearing professional to the patient population;

vi.) Maintaining equilibrium under pressures of fatigue, professional stress, or personal problems; avoiding the effects of alcohol or drugs while on duty.

Unprofessional behavior by a student should be reported to the clinical director, program director, or the Executive Associate Dean, as appropriate. Unprofessional behavior or violations of the code of conduct are addressed as described in the Medical Imaging Program Student Handbook.

MEDICAL IMAGING PROGRAM SPECIFIC STANDARDS
In addition to standards developed by the school of medicine, the program has developed specific standards for students in the Medical Imaging Program.

• Professional Ethics
All persons who work in a hospital share the responsibility of observing a code of ethics, which requires truthfulness, honesty and personal integrity in all human activities. In general, the following applies to all hospitals, clinics, and students:

  o Doctors alone have the training and legal right to diagnose and treat human illnesses and injuries.
  o All information concerning patient or hospital/clinic business must be held in strict confidence. Students are not to discuss outside the hospital or clinic, or even with other students or employees, any information concerning any patient. Students are expected to maintain patient confidentiality in a professional manner. When patients ask questions concerning their exams, always tell them to consult their physician.
  o Students are not to burden patients or other employees with their own personal problems.

• Professional Conduct
The following are some of the rules, which will govern each student’s conduct during clinical hours. The purpose of these rules is not to restrict the rights of individuals, but to define and maintain the rights of all individuals.

Discipline for violation of these rules may range from a verbal warning to a written reprimand to dismissal, depending upon the type of violation and the circumstances surrounding the offense.

All Medical Imaging Students will:
1. Report to the clinical assignment in an alert condition and remain that way throughout the assignment.
2. Not be in the possession of drugs or liquor, nor engage in their use while on clinical assignment.
3. Not be in the possession of weapons while on clinical assignment.
4. Conduct themselves with respect to common decency and morality.
5. Be present and prompt to all clinical assignments.
6. Report to the clinical assignment in the proper complete uniform.
7. Refrain from chewing gum while on clinical assignment.
8. Smoke only in designated areas.
9. Eat only in designated areas.
10. Conduct themselves professionally while on clinical assignment.
11. Refrain from arguing with the clinical personnel or faculty. Discussion is appropriate but only away from the patients.
12. Use appropriate language when conversing with patients and personnel.
13. Refuse any type of gratuity or "tip" from a patient or patient's family.
14. Conduct personal conversations away from patients.
15. Respect all property.
16. Remain in the designated clinical assignment at all times.
17. Use the clinical affiliation telephone only in the event of an emergency.
18. Accept assignments equal to your abilities and take directions from the Clinical Instructors and supervisors.
20. Clock in and out truthfully.
21. Receive personal visitors only in cases of emergency.
22. Not loiter in the Radiology Department of the clinical affiliate at times not specified for clinical assignment.
23. Refrain from using cell phones or other electronic communication devices in the vicinity of any patient, workflow area, or during any procedure as per policy.
24. Only use PAC’s to view images of patients who are in their direct care or when using images for class assignments as directed by faculty.
25. SMILE!

USE OF SOCIAL MEDIA
As described above, behavior of students in the academic setting and beyond must be in keeping with the ideals of the institution and the profession of medicine. The following paragraphs indicate the current standards for behavior that relate to the use of social media.

Each student is responsible for his or her postings on the Internet and in all varieties of social media. In all communications, students are expected to be courteous, respectful, and considerate of others. Inappropriate postings on the Internet or social media will be considered lapses in the standards of professionalism expected of Emory School of Medicine students. Students responsible for such postings are subject to the Conduct Code process in the same manner as for any other unprofessional behavior that occurs outside the academic setting. Students who do not follow these expectations may face disciplinary actions including dismissal from the School of Medicine.

Students within the School of Medicine are urged to consider the following before posting any comments, videos, pictures, or essays to the Internet or a social media site:

1. There is no such thing as an “anonymous” post. Furthermore, any posts or comments submitted for others to read should be posted with full identification of the writer. Where your connection to Emory is apparent, make it clear that you are speaking for yourself and not on behalf of Emory. A disclaimer, such as, "The views expressed on this [blog; website] are my own and do not reflect the views of my University or the School of Medicine" are required.
2. Internet activities may be permanently linked to the author, such that all future employment (residency, fellowship and beyond) may be hampered by inappropriate behavior on the Internet.
3. Making postings “private” does not preclude others copying and pasting comments on public websites. “Private” postings that become public are still subject to sanctions described in the School of Medicine Conduct Code.

4. Do not share information in a way that may violate any laws or regulations (i.e. HIPAA or FERPA). Disclosing information about patients without written permission of the patient and the School of Medicine, including photographs or potentially identifiable information is strictly prohibited. This rule applies to deceased patients also.

5. For Emory’s protection as well as your own, it is critical that you show proper respect for the laws governing intellectual property, copyright and fair use of copyrighted material owned by others, including Emory’s own copyrights and brands. Curricular materials developed by Emory faculty and staff or faculty/staff of other medical schools or educational institutions should not be distributed or redistributed. When in doubt, students should seek guidance regarding appropriate use of such materials.

6. Do not share confidential or proprietary information that may compromise Emory’s research efforts, business practices or security.

In addition to these general School of Medicine policies, Medical Imaging students are expected to adhere to the following guidelines:

- Medical Imaging students should apply professional practice and ethical standards equally to live and online activities.
- Medical Imaging students must refrain from posting images or information about clinical sites or clinical staff.
- Medical Imaging students must refrain from posting images or information about clinical experiences/frustrations.
- Medical Imaging students must never post information, including images that could potentially identify a patient.
- Medical Imaging students should avoid engaging with faculty, clinical staff or employees of any clinical setting on their private social media accounts until they have graduated from the program (i.e. “friending” on Facebook, “following” on Twitter, Snapchat, Instagram etc.)

Extreme caution is urged when mixing professional and personal on-line information and communication. Medical Imaging students have chosen a profession which expects more of its members; an obligation to behave professionally both online and off.

**VIOLATION OF PROFESSIONAL SUITABILITY**

An unsatisfactory suitability evaluation will result in a counseling session and written documentation of events leading to the student’s unsatisfactory evaluation. A serious offense may result in suspension or dismissal while less serious events may result in a warning, probation, and/or grade reduction.

The following scale has been developed by the Medical Imaging Program to inform the students of violations of conduct standards and probationary practices.

<table>
<thead>
<tr>
<th>Violation</th>
<th>Incident Number</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Violation of Supervision Requirements</td>
<td>1</td>
<td>Written Reprimand</td>
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<tr>
<td></td>
<td>2</td>
<td>Suspension **</td>
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<tr>
<td></td>
<td>3</td>
<td>Dismissal</td>
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<tr>
<td>2. Unprofessional Demeanor</td>
<td>1</td>
<td>Counseling</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Written Reprimand/Probation</td>
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<tr>
<td></td>
<td>3</td>
<td>Suspension **</td>
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<td></td>
<td>4</td>
<td>Dismissal</td>
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<tr>
<td>Violation Description</td>
<td>Level 1</td>
<td>Level 2</td>
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<td>-------------------------------------------------------------------------------------</td>
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<td>----------------------------------------------</td>
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<tr>
<td>3. Falsification of Clinical Records (Depending on Severity)</td>
<td>Written Reprimand/Probation</td>
<td>Probation/ Suspension**</td>
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<tr>
<td></td>
<td>2</td>
<td>Probation/ Suspension</td>
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<td></td>
<td>3</td>
<td>Probation/ Suspension</td>
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<tr>
<td>4. Excessive Absences * (&gt; 24 hours/semester)</td>
<td>Counseling/Probation/Required make up</td>
<td>Suspension**/ Required make up</td>
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<tr>
<td></td>
<td>2</td>
<td>Suspension**</td>
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<td></td>
<td>3</td>
<td>Dismissal</td>
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<tr>
<td>5. Unauthorized Absences * (NCNS – No Call No Show)</td>
<td>Written Reprimand</td>
<td>Probation</td>
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<td></td>
<td>2</td>
<td>Probation</td>
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<tr>
<td></td>
<td>3</td>
<td>Suspension**</td>
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<tr>
<td></td>
<td>4</td>
<td>Dismissal</td>
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<tr>
<td>6. Excessive Tardiness * (&gt;3/semester, &gt;3/semester 2x’s in a row, &gt;3/semester 3x’s in a row)</td>
<td>Counseling</td>
<td>Probation</td>
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<tr>
<td></td>
<td>&gt;3/semester 2x’s in a row</td>
<td>Probation</td>
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<tr>
<td></td>
<td>&gt;3/semester 3x’s in a row</td>
<td>Dismissal</td>
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<tr>
<td>7. Dress Code Violation *</td>
<td>Warning</td>
<td>Counseling</td>
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<td></td>
<td>2</td>
<td>Counseling</td>
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<td></td>
<td>3</td>
<td>Reprimand</td>
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<td>4</td>
<td>Suspension**</td>
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<td></td>
<td>5</td>
<td>Dismissal</td>
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<td>8. Hygiene Violation</td>
<td>Counseling</td>
<td>Counseling</td>
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<td></td>
<td>2</td>
<td>Counseling</td>
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<td>3</td>
<td>Reprimand</td>
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<td>4</td>
<td>Suspension**</td>
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<td></td>
<td>1</td>
<td>Written Reprimand</td>
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<td></td>
<td>2</td>
<td>Suspension**</td>
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<td></td>
<td>3</td>
<td>Dismissal</td>
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<tr>
<td>10. Honor Code Violations</td>
<td>Written Reprimand/Probation/Grade penalties</td>
<td>Suspension**</td>
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<tr>
<td></td>
<td>1</td>
<td>Written Reprimand</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Written Reprimand</td>
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<td></td>
<td>3</td>
<td>Written Reprimand</td>
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<tr>
<td>11. Picture taking</td>
<td>Reprimand/Possible dismissal/Probation</td>
<td>Dismissal</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Reprimand/Probation</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Dismissal</td>
</tr>
<tr>
<td>12. PAC’s violation</td>
<td>Dismissal</td>
<td></td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

* Any serious violation of professional ethics may result in immediate dismissal.

* Realize also that some violations impact the work ethic grade as discussed in section VII.

**Time missed due to suspensions must be made up over the semester breaks at the discretion of the clinical coordinator. Any suspension will lead to an automatic one letter grade deduction in the clinical course it occurs.

In addition to the previous scale, clinical site supervisors or instructors may send a student home from a clinical site for violation of professional conduct. The following actions should result in an immediate call from the site to the Clinical Coordinator or Program Director.

- Patient safety issues
• Insubordination
• Altered Mental Status
• Under the influence

The first offense for any of the above listed reasons:
• Student’s personal time is used for missed clinical time up to 2 days
  o If the student has no personal time left grade penalties will apply.
• Clinical coordinator will place the student at an alternate site before the 3rd clinical day.
  o It may not be possible to send the student to a similar type of clinical site.

Second or subsequent offenses for any of the above listed reasons:
• Alternate clinical site will not be provided.
• Student will miss the remainder of the clinical rotation during which the incident occurred.
• Grade penalties will apply.

Clinical sites may refuse to allow a student to attend clinical at their site if they have violated conduct standards. If this happens it may not be possible for a student to complete the required competencies to graduate.

**ACADEMIC STANDING AND ACADEMIC DISMISSAL**

Students earning a grade of “D” in a clinical course will be required to retake the course in which the “D” was earned. Achievement of a grade of “C” will be required when the course is repeated; however, the initial grade of “D” will remain on the student’s official transcript. Repeating a course means the student will have to interrupt the program of full-time study and graduation will be delayed for one year. During the intervening year, individualized plans of study will be developed jointly by the student and the Program Director.

Achievement of two or more grades of “D” in medical imaging courses will automatically result in exclusion from the program.

Achievement of one grade of “F” or “IF” in any medical imaging course will automatically result in exclusion from the program.

Students experiencing clinical or personal difficulty may withdraw from a course. Withdrawals will only be granted prior to mid-term and a grade of W (withdrawal without penalty) or WF (withdrawal failing) will be assigned as appropriate. Withdrawing from a course means the student will have to interrupt the program of full-time study and graduation will be delayed for one year. During the intervening year, individualized plans of study will be developed jointly by the student and the Program Director.

**GRADE POINT AVERAGE REQUIREMENT**

A 2.0 average must be maintained in each semester to remain in good academic standing and to continue in the program without interruption of full-time status.

A cumulative GPA of at least 2.0 (didactic and clinical) is required for graduation.

**CLINICAL PROBATION**

Students may be placed on clinical probation for violation of policies, misconduct, absenteeism, or tardiness. Specific requirements for continuation will be looked at on an individual basis and included on the probation form.
HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT (HIPAA)

All students will be required to attend HIPAA privacy training before beginning their clinical education. Students will also be required to satisfactorily complete the University HIPAA competency check by the deadline date. Students will be required to sign confidentiality agreements and are subject to all rules, regulations and laws regarding patient privacy.

Our Compliance Pledge
As a member of the Emory Healthcare team, we each pledge to:

- Follow all laws, regulations and EMORY HEALTHCARE policies. The laws, regulations and ethical principles that govern health care are complicated.
- Ask questions if the rules are unclear. If the rules are unclear, ask your supervisor, other management or call the office of compliance programs at 404-778-2757. Keep asking until you get a satisfactory answer.
- Act when you think something is not right. When you think something is not right, discuss the issue with your supervisor. If you are not comfortable doing that, or you are not satisfied with the response, go to higher management in your area. If you still are not comfortable, call the office of compliance programs at 404-778-2757 or the EMORY HEALTHCARE Trust Line at 1-888-550-8850.
- Report potential violations. Follow this same line of communication when you know a law, regulation, health care policy or rule has been broken or if you are asked to break one of them. It is EMORY HEALTHCARE's policy that no employee is punished for raising an issue or reporting a concern in good faith. Your adherence to the EMORY HEALTHCARE compliance program will be considered in your performance evaluation.
- Be a part of the solution if a problem is found. When a problem is identified, EMORY HEALTHCARE needs you to help solve the problem. Immediate and long-term correction is critical to making sure a problem is not repeated.
- Engage in ethical conduct and expect ethical conduct from others. Participate only in those activities of which you are sure you and EMORY HEALTHCARE can be proud.

The following guidelines will help you do the right thing:

- If you know or think something is wrong, don't do it, even if someone is pressuring you.
- If you are concerned about something you are doing or are worried that it might be discovered, stop get advice, report the concern and redirect your actions so that you know you are doing the right thing.
- Students may not look up any patient images unless they are involved in direct patient care or they have received permission from a course instructor for an assignment.
- Students may not look up their own or any friend or family members images.
SECTION IV: OBJECTIVES

During clinical rotations students are expected to achieve a variety of objectives. This section explains general and attitudinal objectives that relate to all clinical rotations and explains specific objectives for the different areas of the clinical rotations. Students will also find specific objectives for each clinical course in the clinical syllabus. Objectives for specialty areas, such as pediatrics, geriatrics, CT, MRI, Interventional and elective rotations, will be supplied to the student during the semester in which the rotation occurs. Prior to all clinical rotations students should review all objectives relevant to the area.

GENERAL
The clinical courses and laboratory experiences are designed to familiarize you with the many aspects of Medical Imaging. Specifically, we desire that students:
1. Acquire expertise and proficiency in a wide variety of diagnostic radiographic procedures by applying classroom theory to the actual practice of technical skills on specified levels of competency.
2. Develop and practice professional work habits and appropriate interpersonal relationships with patients and other members of the health care team.
3. Acquire a broad knowledge of anatomy and physiology.
4. Learn the principles and proper operation of many types of x-ray equipment and accessories.
5. Learn to properly evaluate the requisition, identify the patient, and demonstrate proper patient care in preparing the patient for his the exam.
6. Follow proper procedures to maintain the room in a clean, tidy and well-supplied manner.
7. Learn the correct method of radiologic positioning.
9. Learn nursing procedures and sterile techniques pertinent to radiology.
10. Acquire a basic background in computer operations, office procedures and department administration.
11. Participate in continuing education activities.
12. Become competent in the use of plain film radiography as applicable.
13. Become proficient in digital imaging techniques including PACS.
14. Learn the appropriate response to emergencies by familiarizing themselves with emergency techniques, the location of the crash carts, notification systems and phone numbers.
15. Practice universal precautions.
16. Evaluate images.
17. Appreciate the role of the radiologist in medical imaging.
18. Provide proper clinical documentation for all work.

Example Script: Patient Involvement and Site Marking

- Hello Mr. or Mrs. ______________ my name is____________.
  - I am an Emory Student technologist and I will be performing your x-ray exam today. (They have a right to refuse you, if so contact the technologist so they can take over the exam.)

- I will be performing an x-ray of/on __________________________ (indicate body part and side, RT/LT/Both).

- Ask “Can you tell me a little about your medical history and why you are here today?”
  - Include this information in RADNET
  - Radiologists like to get the patients history.

- At start and completion of the exam, ask the patient if they have any questions or concerns.
- Position the patient appropriately and while placing the marker say: “I am placing a (Rt or Lt) marker near your (name the body part, e.g. foot) to indicate the correct side that I am x-raying.”

- For each position and/or side use the same language as above.

- When the x-rays have been completed, thank the patient by name for their cooperation.

- Tell them what they may expect to happen next:
  - You will make the images available by computer within a few minutes.
  - The radiologist, orthopedist, ED physician (whichever is appropriate for the site you are at) will interpret the exam.
  - The results will be provided to you by your doctor.

- Refer to the patient by name and include the family members as well.

- Ask the patient if there is anything else that you can do for them today.

**ATTITUDINAL**
These objectives reflect desired behavior patterns, attitudes, beliefs, values and tendencies to act in a prescribed manner. They are relative to any and all assignments.
1. The student will conduct him/herself in a professional manner at all times.
2. The student will be properly groomed, adhering strictly to the dress code as outlined in the student handbook.
3. The student will practice good communication skills in their interactions with patients and department, clinical, and hospital personnel.
4. The student will act and respond to patients and staff in a responsible manner.
5. The students' attitude will be one of concern, cooperation and interest in their relationship with the patient and the staff with which they are working.
6. The student will organize their work so that the exam is expedited efficiently, with maximum patient care and minimum patient discomfort.
7. The student will be punctual and will notify the appropriate personnel when there is a possibility of being late for clinic, as outlined under General Information Section.
8. It is very important in the field of radiology to be able to anticipate situations that may arise in the department, and be able to cope in a professional and responsible manner.
9. The student will follow the proper procedures to register a grievance. Problems in clinic will be addressed to the clinical faculty. Problems related to the school will be submitted to the educational coordinator. Remember that the faculty is always available and open to communication with the students.

**CHEST RADIOGRAPHY**
1. Student will demonstrate accurate positioning skills and equipment manipulation for routine chest radiographic studies.
2. Student will be able to describe fleshy and bony landmarks that aid in centering for a designated structure.
3. Student will be able to name and locate thoracic structures.
4. Student will demonstrate the ability to select proper technique, screens and SID for routine chest radiographic studies.
5. Student will use the proper accessories and technique to demonstrate radiation protection to the patient and himself.
6. Student will use proper image identification technique.
EMERGENCY ROOM
1. Student will learn to function in the atmosphere of the emergency department.
2. Student will demonstrate the ability to image critically ill patients using appropriate technical factors, positioning skills, and equipment manipulation skills.
3. Student will function efficiently by imaging patients quickly and accurately.
4. Student will work as a team with the emergency room personnel.
5. Student will participate in emergency and patient care procedures under the direct supervision of emergency department personnel.

FLUOROSCOPY ROTATION
1. Student will demonstrate knowledge of the appropriate contrast medium utilized for each fluoroscopic study and its preparation.
2. Student will demonstrate the ability to assist the radiologist during the exam and in administering contrast medium.
3. Student will assist the patient in moving during the exam as needed.
4. Student will demonstrate accurate positioning skills for fluoroscopic studies.
5. Student will be able to identify, locate and describe each organ of the gastrointestinal system.
6. Student will demonstrate the ability to manipulate the equipment and select proper technique for fluoroscopic studies.
7. Student will demonstrate the ability to take proper patient histories for fluoroscopic studies.
8. Student will demonstrate knowledge of the proper sequencing for fluoroscopy.
9. Student will demonstrate the selection, preparation and use of accessory items (such as, grids, BE bags, enema tips, etc.) when appropriate.
10. Student will tip patients for Barium enema exams in order to prove competency.
11. Student will use the proper accessories and technique to demonstrate radiation protection to the patient and to himself.
12. Student will demonstrate proper fluoroscopy technique for the terminal ileum, gallbladder, and bladder.
13. Student will be able to use the fluoroscope and make exposures with the fluoroscope.

GENITOURINARY ROTATION
1. Student will demonstrate the ability to select the appropriate contrast medium and dosage for urinary examinations.
2. Student will demonstrate proper sterile technique for drawing up and administration of contrast medium and emergency drugs.
3. Student will demonstrate the ability to push contrast medium into the patient’s vessels under direct supervision.
4. Student will be able to identify the location of the crash cart.
5. Student will demonstrate accurate positioning skills and equipment manipulation for exams of the urinary tract.
6. Student will be able to describe fleshy and bony landmarks that aid in centering for a designated structure.
7. Student will be able to identify and locate organs of the urinary system.
8. Student will demonstrate general knowledge on indications, contraindications and pathologic conditions of the Urinary system.
9. Student will demonstrate the ability to select proper technique for urinary studies.
10. Student will demonstrate the selection and use of accessory items (such as, compression bands, needle types, blood pressure cuffs, etc.) and will be able to monitor blood pressure, pulse and respiration.
11. Student will use the proper accessories and technique to demonstrate radiation protection to the patient and himself.
12. Student will use proper image identification technique.

**ORTHOPEDIC RADIOGRAPHY**
1. Student will demonstrate accurate positioning skills and equipment manipulation for routine and non-routine orthopedic radiographic studies.
2. Student will demonstrate accurate patient care, positioning skills and equipment manipulation for trauma radiographic procedures.
3. Student will be able to identify and locate the bones of the appendicular and axial skeleton.
4. Student will be able to describe fleshy and bony landmarks that aid in centering for a designated structure.
5. Student will demonstrate proper selection and use of accessory items (such as, grids, cassettes, positioning devices, cones, etc.) when appropriate.
6. Student will demonstrate the ability to select proper technique for orthopedic radiographic studies.
7. Student will use the proper accessories and technique to demonstrate radiation protection to the patient and himself.
8. Student will use proper image identification technique.

**PORTABLES**
1. The student will demonstrate accurate positioning skills and equipment manipulation for a variety of bedside exams.
2. Student will demonstrate the ability to select the proper techniques for various bedside exams.
3. The student will follow department procedures in processing the clerical work associated with bedside exams.
4. The student will be responsible and sensitive to the nursing personnel on the various units (i.e., CCU, ICU).
5. Student will use the proper accessories and technique to demonstrate radiation protection to the patient and himself.
6. Student will use proper image identification technique.
7. The student will always have a registered technologist in close proximity (on the same floor and wing) when performing portable exams under indirect supervision following competency.

**SURGERY**
1. Student will follow the operating room (O.R.) requirements for dress and equipment maintenance, and will properly demonstrate surgical asepsis technique.
2. Student will demonstrate positioning skills and equipment manipulation for:
   - Chest and Abdomen Procedures
   - Hip Pinning
   - Retrograde pyelograms
   - Upper and Lower Extremity Procedures
   - C-Arm Procedures
   - Spine Procedures
   - Other Orthopedic Procedures
   - Etc.
3. Student will demonstrate the ability to select proper techniques for the above procedures.
4. Student will use the proper accessories and technique to demonstrate radiation protection to the patient and himself.
5. Student will use the proper image identification technique.
6. Student will identify anatomical structures.
7. Student will employ proper imaging techniques.
8. Student will follow directions from the surgeon and technologist.
9. The student will always have a registered technologist in the surgery area when performing C-arm exams under indirect supervision following competency.
SECTION V: CLINICAL EDUCATION MASTER PLAN

Students will rotate through all clinical sites and gain experience in the following areas:

- Abdomen/GI/Fluoroscopy
- Chest and Thorax
- Computed Tomography (CT)
- Digital Imaging
- Elective Rotations*
- Emergency Room
- Geriatric Radiography
- Interventional Radiography (IR)
- Magnetic Resonance Imaging (MRI)
- Mobile Radiography/Portables
- Orthopedics
- Pediatric Radiography
- Surgery/OR

TOTAL GENERAL CLINICAL HOURS: Approximately 1684 hours

Students will also rotate through areas of their chosen field of expertise

- CT – Computed Tomography
- IR – Interventional Radiology
- MRI – Magnetic Resonance Imaging
- Women’s Health
  - Mammography
  - Bone Density
- Radiology Education
- Healthcare management

TOTAL MINOR TRACK PRACTICUM CLINICAL HOURS:
Approximately 544 hours CT, MRI, IR and Women’s Health
Education and Healthcare Management hours are variable

The student will be assigned to a clinical site or several clinical sites for a period of time each semester. The student will receive a specific rotation schedule each semester with specific dates.

Students may not rotate through the exact clinical sites or for the exact amount of time as other students; however, all students will rotate through areas where they will receive comparable clinical experiences.

The final two semesters will be used to finish final competency exams and gain exposure to different modalities by selecting elective rotations. The student will be assigned to areas based on their competency needs. In certain instances, students that finish their competencies early and are deemed competent and proficient in basic exams by the faculty, may work with the Clinical Coordinator to add elective rotations.

*Elective rotations include but are not limited to:

- Bone Density
- Cardiovascular
- Computed Tomography
- Interventional Radiography
- Magnetic Resonance Imaging
- Nuclear Medicine
- PET
- PET CT
- Radiation Therapy
- Ultrasound
- Ultrasound

Students cannot be guaranteed their choice of electives due to schedules and clinical site constraints, but every effort will be made to ensure that student’s will be able to attend the clinical area of their choice.
SECTION VI: STUDENT CLINICAL COMPETENCY EVALUATION

RATIONALE
The main purpose of the clinical education course(s) in any Medical Imaging Program is to affect a transfer of knowledge from theory to the actual acquisition of skills in clinical diagnostic radiography, up to a level of job entry competency at the time of graduation.

This transfer is accomplished by a continuum of clinical assignments in all aspects of diagnostic radiographic procedures, with their correlation as close as possible to classroom and laboratory experiences.

In order to measure the student's ability to perform at satisfactory levels of competency, a method of evaluation has been established by the American Society of Radiologic Technologists, and accepted by the Joint Review Committee on Education in Radiologic Technology. It has been slightly revised to meet the particular needs of this program. Its ultimate goal, however, does not differ from the philosophy of the two agencies listed above. That is, to graduate competent radiographers who perform at levels expected by prospective employers.

CLINICAL COURSES
Beginning with the first semester, the first of eight clinical courses will be taught. Coupled with the first clinical course are such didactic courses as Introduction to Medical Imaging, Patient Care, Radiographic Procedures, and Anatomy and Physiology. During this term the student will engage in laboratory sessions under the supervision of the faculty. The student will demonstrate in role playing activities the ability to simulate correct methods of patient immobilization and transfer, body mechanics, oxygen administration, simple radiographic exams, portable and c-arm equipment manipulation, etc. The faculty will evaluate these activities. In the clinical setting the student will manipulate the equipment, assist the patient, observe the technologist performing exams, and begin to understand and practice basic radiographic procedures and digital imaging techniques. During the first clinical course the student will be under the direct supervision of a technologist at all times.

The second clinical course is coupled with Patient Care, Anatomy and Physiology and Radiographic Procedures. Students will again engage in laboratory sessions in Radiographic Procedures and will be required to successfully simulate orthopedic radiographic positioning procedures. This will be done under the supervision of the program faculty. In the clinical setting the student begins to prove competency in basic radiographic procedures such as Chest, Portable Chest, abdomen and orthopedics and becomes more comfortable with digital imaging. The student will not be able to perform any radiographic procedure independently in the clinical affiliate until competency has been achieved on the procedure. In the meantime, the student will assist the technologist in the performance of his duties. Once competency has been achieved, indirect supervision on these exams is appropriate, though any repeated image must be done under direct supervision. The technologist must be in the room with the student during all repeats. At some clinical facilities direct supervision is required on all exams.

The majority of the time spent in the first and second clinical courses will consist of a transition from an observation, or passive role, to an active participating role, assisting the R.T.(R) in radiographic examinations. The student's rate of progress will depend on the ability to understand and perform the various assigned tasks.

The third through eighth clinical courses are primarily concerned with the student gaining experience in the various diagnostic procedures. During these courses, the student will gradually move into a performance stage in which he or she will actually be performing most all basic radiographic procedures under the indirect supervision of a registered radiologic technologist. R.T.(R) The student will also become proficient in the use of digital imaging.
COMPETENCY EVALUATION
When the student has performed a procedure at an acceptable level of performance the required number of times and have simulated on the procedure in the lab or clinical site and/or covered it in procedures class, they may request a competency evaluation. During this evaluation the student will demonstrate their skill and competency in that particular examination. If a student fails the competency evaluation, continuation in the clinical participation stage for additional experience on that exam is required.

A total of thirty-four* competency exams on live subjects are required in Semesters II – VIII. Certain competencies are mandatory. Additional final competency exams are performed in the last two semesters. Exact requirements on the number of competencies required each semester are outlined in each clinical course syllabus. Upon the successful completion (score of 80) of a regular competency evaluation, the student will be allowed to perform that examination under indirect supervision. The student will continue to perform these examinations after competency has been achieved.

The steps for performing competencies are
1. Student engages in theory and laboratory classes and begins clinical observation in the clinical education courses.
2. Student assists the technologist in exams and gains knowledge.
3. The student successfully simulates the exam in the laboratory and in some cases in clinical. (i.e. scoliosis).
4. Student performs and appropriately documents the required number of prerequisites under direct supervision. Documentation includes date, identification number, exposure factors, and technologist. Some exams require the patient’s age and/or history.
5. The student requests a Competency Evaluation under direct supervision by a designated technologist prior to the start of the exam. Students are expected to perform the exam in accordance with site protocols. Emory Healthcare P. CXR and MSK protocols are included at the end of this section for reference.
6. The student will complete all aspects of the exam from start to finish including all applicable computer work.
7. Students may not review notes once the competency has been announced. Sophomore and Junior students may refer to their technique chart.
8. The student will document the date, identification number, and exposure factors. The required data must be completed in its entirety that day.
9. The technologist will complete the evaluation form on e*Value. Upon completion, the form is reviewed by the Clinical Coordinator and student. The Faculty reserves the right to negate any competency. A score of at least 80 is considered successful; any unsatisfactory in a category negates the competency. Students will review the evaluation once it is completed.
10. Once successfully completed, the student engages in performance of that exam under indirect supervision, however, any repeated image must be done under direct supervision and be recorded in PxDx. If the student is unsuccessful in completing the competency exam they gain additional experience in the exam and then request to repeat the competency evaluation.
11. The student is evaluated on retaining competency in subsequent semesters through the performance of interval checks and final competencies.
12. Final competency exams will be performed during the last two clinical courses. If a student fails one or more of the requirements of the exam, he will return to that area of weakness to be re-evaluated. A successful completion (score of 90) of the final competency evaluation completes the requirements for clinical performance. Student passing of the Final Competency Evaluation is an indication of job entry-level competency.
13. Once a student has completed all of their regular and final competency exams they may request to change the remainder of their orthopedic and fluoroscopy rotations in the final semester to electives of their choice. This will only occur if the chosen rotation area is acceptable to the clinical affiliate, the rotation does not interfere with other students scheduled rotations, and the faculty feels the student is adequately prepared for basic radiographic procedures.
COMPETENCY EXAMS AND PREREQUISITE NUMBERS
*Subject to change based on ARRT clinical competency requirements

MANDATORY COMPETENCY EXAMS
After performing the specified number of prerequisite exams, students must prove competency on at least 29 of the 37 exams below. ALL students must complete those procedures italicized and bolded. The projections or number of projections required for each competency/prerequisite exam are included.
*Subject to change based on ARRT clinical competency requirements

<table>
<thead>
<tr>
<th>I. Thorax and Abdomen</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>A. Routine Chest (PA &amp; Lateral)</td>
<td>10</td>
</tr>
<tr>
<td>B. Stretcher or Wheelchair Chest (AP)</td>
<td>2</td>
</tr>
<tr>
<td>C. Abdomen – Supine (KUB)</td>
<td>5</td>
</tr>
<tr>
<td>D. Abdomen – Erect</td>
<td>3</td>
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<tr>
<td>E. Ribs (AP/PA and oblique)</td>
<td>3</td>
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</tbody>
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<table>
<thead>
<tr>
<th>II. Upper Extremities &amp; Shoulder Girdle (Minimum two projections)</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>A. Finger or thumb</td>
<td>2</td>
</tr>
<tr>
<td>B. Hand</td>
<td>2</td>
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<tr>
<td>C. Wrist</td>
<td>2</td>
</tr>
<tr>
<td>D. Forearm</td>
<td>2</td>
</tr>
<tr>
<td>E. Elbow</td>
<td>2</td>
</tr>
<tr>
<td>F. Humerus</td>
<td>2</td>
</tr>
<tr>
<td>G. Shoulder</td>
<td>2</td>
</tr>
<tr>
<td>H. Clavicle</td>
<td>2</td>
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<thead>
<tr>
<th>III. Lower Extremities &amp; Pelvic Girdle (Minimum two projections except AP Pelvis, XTL hip)</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Foot</td>
<td>3</td>
</tr>
<tr>
<td>B. Ankle</td>
<td>3</td>
</tr>
<tr>
<td>C. Lower leg (Tib/Fib)</td>
<td>3</td>
</tr>
<tr>
<td>D. Knee</td>
<td>3</td>
</tr>
<tr>
<td>E. Femur</td>
<td>3</td>
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<tr>
<td>F. Pelvis</td>
<td>3</td>
</tr>
<tr>
<td>G. Hip</td>
<td>3</td>
</tr>
<tr>
<td>H. XTL Hip</td>
<td>3</td>
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<tr>
<th>IV. Vertebral Column</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Cervical Spine (Dept. protocol – minimum 4 views)</td>
<td>5</td>
</tr>
<tr>
<td>B. Thoracic Spine (AP &amp; Lat)</td>
<td>2</td>
</tr>
<tr>
<td>C. Lumbar Spine (AP, Lat &amp; Spot)</td>
<td>3</td>
</tr>
<tr>
<td>D. XTL Spine</td>
<td>2</td>
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</tbody>
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<thead>
<tr>
<th>V. Surgery &amp; Portables</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Portable abdomen</td>
<td>3</td>
</tr>
<tr>
<td>B. Portable chest – Adult</td>
<td>10</td>
</tr>
<tr>
<td>C. Portable orthopedics – (anything skeletal)</td>
<td>3</td>
</tr>
<tr>
<td>D. C-arm Procedure – With manipulation to more than 1 projection</td>
<td>3</td>
</tr>
<tr>
<td>E. Surgical C-arm Procedure – With manipulation around a sterile field</td>
<td>2</td>
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<thead>
<tr>
<th>VI. Pediatrics</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Chest, 6 years or younger</td>
<td>3</td>
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</table>

<table>
<thead>
<tr>
<th>VII. Geriatric (Patient must be physically or cognitively impaired due to aging)</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Routine Chest (PA &amp; Lateral)</td>
<td>2</td>
</tr>
<tr>
<td>B. Upper Extremity (min. two projections)</td>
<td>2</td>
</tr>
<tr>
<td>C. Lower Extremity (min. two projections)</td>
<td>2</td>
</tr>
</tbody>
</table>
VIII. Trauma (serious injury or shock to the body – pt. requires special handling)

A. Trauma Upper Extremity (non shoulder) (Minimum two projections) 2
B. Trauma Shoulder (Y, Transthoracic or Axillary) 2
C. Trauma Lower Extremity (Minimum two projections) 2

ELECTIVE COMPETENCY EXAMS

In addition to the mandatory competency exams, students must perform competency on a minimum of 12 of the 28 elective exams; 1 must be a Contrast Enema. Each requires two prerequisite exams unless otherwise noted. (Projections based on department protocol unless otherwise specified)

1. Lat Decub CXR 12. Facial Bones 23. Small Bowel Series (Must include all KUB’s & spot TI with marker)
5. Scapula (AP/Lat) 16. Mandible (not panorex) 27. Pediatric Abdomen
8. Patella 19. SI joints
9. Calcaneus (Lat/Axial) 20. IVU
10. Skull
11. Paranasal Sinuses

TECHNOLOGISTS THAT MAY PERFORM COMPETENCIES

Faculty members, Education students, and the following technologists may evaluate the students on the above competency exams. (This list is subject to change, students will be provided with updates.)

CHILDREN’S HEALTHCARE OF ATLANTA AT EGGLESTON (CHOA): Angie Bagwell, Marlo Daley, Atif Khan, Fu Tai Lu, Kelly Mostek, Theresia Perez, Andrea Prater, Angie Smith, Janelle Smith, Mary Street

EMORYJOHNS CREEK HOSPITAL (EJCH): Mindy Farris, LaToya Gotel, John Stefanie

EMORY ST. JOSEPHS HOSPITAL (ESJH): Kesha McCoy, Tiffany Roberts, Susan Taylor (OPIC)

EMORY UNIVERSITY ORTHOPAEDIC AND SPINE HOSPITAL (EUOSH): Jeannine Blotske, Robert Wells

EMORY UNIVERSITY HOSPITAL (EUH): Christian Elliott, Aurora Marinescu, John Mathew, Janiece Scott, Vicki White

EMORY UNIVERSITY HOSPITAL – MIDTOWN (EUHM) & THE MEDICAL OFFICE TOWER (MOT): Sabine Alexis, Radreckia Allen, Michael Daise, Selena Banks-Dickerson, Nicole Foster, Olivia Glass, Dustin Harris, Bertu Kedir, Deon Moore, Michael Panas, Christi Smith

RESURGENS ORTHOPAEDICS – COVINGTON: Adrienne Williams

RESURGENS ORTHOPAEDICS – LAWRENCEVILLE: Meredith Baggett, Diane King, Nancy Turner

RESURGENS ORTHOPAEDICS – MCDONOUGH: Kristy Hughes

RESURGENS ORTHOPAEDICS – ROSWELL: Angela Pagan

RESURGENS ORTHOPAEDICS – ST. JOE: Nicole Cowan, Kasandra Hanson, Lisa Hecht, Evelyn Morales, Noel Sambas

THE EMORY CLINIC (TEC - WCI): Eric Edmondson, Jen McCorkle, Veena Rajeevan

THE SPORTS MEDICINE AND SPINE CENTER AT EXECUTIVE PARK (EP): Page Chappell, Betsy Collins, Kim Landmon, Cherie Ross, Jason Smitherman

Subject to change: Revised 8/16
CRITERIA FOR COMPETENCY EVALUATION

Criteria for Performance Evaluation:

A. Student will evaluate the requisition, complete the required paper/computer work and
   1. Identify procedures to be performed.
   2. Identify the patient's age and name.
   3. Identify patient location and mode of transportation.
   4. Acknowledge any pathological conditions.
   5. Acquire appropriate clinical history.

B. Student will prepare the radiographic room and
   1. Provide clean and orderly work area.
   2. Verify that equipment is operational.
   3. Obtain appropriate supplies for examination.

C. Professionalism and proper patient care skills will be demonstrated by
   1. Selecting the correct patient.
   2. Introducing himself/herself to patient and briefly explaining the procedure.
   3. Requesting last menstrual period (LMP) date of female patients between the ages of 12-60.
   4. Transporting patient to appropriate imaging area.
   5. Verifying if patient is properly prepared for the examination.
   6. Identifying, when appropriate, that there are no contraindications for performing procedure.
   7. Providing safe storage for patient's belongings.
   8. Providing appropriate assistance to the radiographic table based on patient's condition.
   9. Maintaining patient dignity and modesty through proper gowning and covering for the patient.
  10. Talking to the patient in a concerned, professional manner.
  11. Applying universal precautions as established by the Centers for Disease Control.
  12. Providing proper instructions for moving and breathing.
  13. Checking patient's condition at regular intervals.
  14. Providing for patient security if the patient is left alone in the radiographic room.
  15. Wearing the proper attire and identification badge.

D. The student will demonstrate appropriate equipment operation by
   1. Maneuvering the x-ray tube and bucky utilizing appropriate controls and locks.
   2. Selecting the proper IR, IR holder, grid, etc.
   3. Selecting appropriate SID.
   4. Manipulating image receptor as appropriate for accurate imaging.
   5. Measuring the patient.
   6. Using immobilization devices as needed.
   7. Referring to a technique chart.
   8. Selecting exposure factors.
   9. Using equipment so as not to exceed recommended safety guidelines.

E. The student will demonstrate positioning/centering skills by
   1. Positioning the patient correctly.
   2. Positioning the part correctly.
F. The student will demonstrate centering skills by
   1. Aligning the center of part to be demonstrated to center of the Image receptor.
   2. Aligning the tube and image receptor.
   3. Setting the correct tube angle.

G. The student will select exposure factors
   1. Adequate to penetrate the part.
   2. Adequate to provide the correct density.
   3. To deliver the least amount of radiation possible to the patient.

H. Evidence of Radiation Protection will be demonstrated by
   1. Collimating to part.
   2. Using gonadal shields, if appropriate.
   3. Demonstrating use of lead apron, blockers and gloves, if appropriate.
   4. Selecting proper exposure factors.
   5. Adjusting exposure factors for motion, pathology or patient size when appropriate.
   6. Verifying that no repeats were performed.

I. The student will solve problems
   1. Using critical thinking skills.
   2. By evaluating the patient condition.

J. The student will perform the projections
   1. Required by the facility.
   2. In a manner consistent with radiologic positioning manuals except in special circumstances.

K. The student will perform the exam in a reasonable amount of time
   1. Considering the students skill level.
   2. Considering the patient condition and comfort.

L. The student will demonstrate appropriate imaging processing technique by
   1. Preparing the detector for exposure.
   2. Placing the IR in the image reader correctly.
   3. Printing films from digital imaging systems when required.
   4. Using digital radiography, teleradiology, PACS to transmit images to the correct locations.

M. The student will demonstrate appropriate patient identification technique by
   1. Selecting the correct patient from the worklist.
   2. Filing the film in the correct jacket, where applicable.
   3. Using the correct identification with digital imaging.

N. The identification of the image is assessed by
   1. The proper and correct display of their "R," "L," initialed markers. (non computer generated) per Emory protocol where applicable. An example is at the end of this section.
   2. The proper display of accessory markers visible, if required.
Criteria for Image Evaluation:

O. The student will identify if the appropriate structures are visible by
   1. Verifying that the part is shown in proper perspective.
   2. Verifying that adequate detail exists and motion is absent.

P. The student will demonstrate knowledge of anatomy by*
   1. Identifying anatomical structures on the image.
   2. Identifying related anatomical structures.

Q. The student will evaluate positioning by
   1. Comparing part position to positioning criteria.

R. The student will evaluate proper alignment and centering by verifying that the
   1. Image is centered.
   2. Part is centered.
   3. Tube is centered.
   4. Patient is aligned correctly.

S. The technical factors are assessed by
   1. Evaluating contrast and density.
   2. Evaluating the student’s ability to compensate for pathology.
   3. Using the correct exposure factors to produce a diagnostic image.
   4. Using the correct IR, grid, SID and OID.

T. The student will identify artifacts
   1. By classification.
   2. By type.

Faculty members will intermittently pull student images/films for review. Faculty members reserve the right to disallow any competency exam based on failure of any of the above categories.

*MINIMUM PERTINENT ANATOMY

CHEST

<table>
<thead>
<tr>
<th>PA/AP Projection</th>
<th>Lateral Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Apices</td>
<td>10. Hilum</td>
</tr>
<tr>
<td>2. Bases</td>
<td>11. Mediastinum</td>
</tr>
<tr>
<td>3. Costophrenic angles</td>
<td>12. Diaphragm</td>
</tr>
<tr>
<td>4. Trachea</td>
<td>13. Air in stomach</td>
</tr>
<tr>
<td>5. Carina</td>
<td>14. Aortic knob</td>
</tr>
<tr>
<td>7. Lung markings</td>
<td>16. SC joints</td>
</tr>
<tr>
<td>8. Number of lobes in each lung</td>
<td>17. Clavicle</td>
</tr>
<tr>
<td>9. Heart</td>
<td>18. No. of ribs visible</td>
</tr>
</tbody>
</table>

ABDOMEN – SUPINE, PRONE, ERECT, DECUB, PORTABLE

1. Diaphragm
2. Liver
3. Ribs
4. Kidneys
5. Spleen
6. Small intestine
7. Psoas muscles
8. Pelvis (iliac crest, symphysis pubis)
9. Spine
10. Bladder
11. Stomach
12. Large intestine
### RIBS (& all chest anatomy)

1. Number of ribs visible
2. Anterior ribs
3. Posterior ribs
4. Axillary portion
5. Head of rib
6. Neck of rib
7. Body of rib
8. Costotransverse joint
9. Costovertebral joint

### FOOT

1. Phalanges
2. Metatarsals
3. Tarsals
4. Navicular
5. Calcaneus
6. Talus
7. Cuboid
8. Cuneiforms
9. Sesamoids
10. Sinus tarsi
11. Interphalangeal joints
12. Metatarsophalangeal joints
13. Tarsometatarsal joints

### ANKLE

1. Tibia
2. Fibula
3. Talus
4. Lateral malleolus
5. Medial malleolus
6. Mortise
7. Distal tibiofibular joint
8. Talofibular joint
9. Calcaneus

### LOWER LEG (TIB/FIB)

1. Mortise
2. Talus
3. Talofibular joint
4. Distal tibiofibular joint
5. Lateral malleolus
6. Medial malleolus
7. Shaft of Tibia
8. Shaft of Fibula
9. Lateral condyle of tibia
10. Medial condyle of tibia
11. Intercondylar fossa (tibial spine)
12. Tibial plateau
13. Tibial tuberosity
14. Head of fibula
15. Styloid process of fibula
16. Patella (apex, base)

### KNEE

1. Femur
2. Tibia
3. Fibula
4. Patella (apex, base)
5. Lateral epicondyle of femur
6. Lateral condyle of femur
7. Medial epicondyle of femur
8. Medial condyle of femur
9. Intercondylar fossa
10. Lateral condyle of tibia
11. Medial condyle of tibia
12. Intercondylar eminence (tibial spine)
13. Tibial plateau
14. Head of fibula
15. Styloid process of fibula
16. Tibial tuberosity

### FEMUR

1. Acetabulum
2. Head of femur
3. Neck of femur
4. Greater trochanter
5. Lesser trochanter
6. Shaft of femur
7. Intercondylar fossa
8. Lateral epicondyle of femur
9. Lateral condyle of femur
10. Medial epicondyle of femur
11. Medial condyle of femur
12. Patella (apex, base)
### PELVIS

1. Innominate bone
2. Ischium
3. Ilium
4. Pubis
5. Crest
6. ASIS
7. SI joints
8. Obturator foramen
9. Ala
10. Ischial tuberosity
11. Pubic symphysis
12. Acetabulum
13. Head of femur

### HIP (AP HIP or PELVIS & Frog lateral)

1. Head of femur
2. Neck of femur
3. Greater trochanter
4. Lesser trochanter
5. Crest
6. ASIS
7. SI joints
8. Acetabulum
9. Ala
10. Ilium
11. Ischium
12. Pubis
13. Obturator foramen
14. Innominate bone
15. Pubic symphysis
16. Ischial tuberosity

### TRAUMA HIP (includes AP and XTL)

1. Head of femur
2. Neck of femur
3. Greater trochanter
4. Lesser trochanter
5. Crest
6. ASIS
7. SI joints
8. Acetabulum
9. Ala
10. Ilium
11. Ischium
12. Pubis
13. Obturator foramen
14. Innominate bone
15. Pubic symphysis
16. Ischial tuberosity

### FINGER OR THUMB

1. Phalanges
2. Number of phalanges
3. Metacarpals
4. Number of metacarpals
5. Proximal phalanx
6. Middle phalanx
7. Distal phalanx
8. Head of metacarpal
9. Sesamoids (if applicable)
10. Interphalangeal joint
11. Proximal Interphalangeal joint
12. Distal Interphalangeal joint
13. Metacarpophalangeal joints
14. Metacarpals and phalanges are numbered in which direction?

### HAND

1. Phalanges
2. Number of phalanges
3. Metacarpals
4. Number of metacarpals
5. Carpals
6. Number of carpals
7. Proximal phalanx
8. Middle phalanx
9. Distal phalanx
10. Head of metacarpal
11. Sesamoids
12. Interphalangeal joints
13. Metacarpophalangeal joints
14. Metacarpals and phalanges are numbered in which direction?
WRIST

1. Carpals and number of
2. Scaphoid (navicular)
3. Lunate (semilunar)
4. Triquetrum (cuneiform, triangular)
5. Pisiform
6. Trapezium (greater multangular)
7. Trapezoid (lesser multangular)
8. Capitate (os magnum)
9. Hamate (unciform)
10. Ulna
11. Radius
12. Styloid processes
13. Base of metacarpals
14. Distinguishing characteristic of the hamate is what?

FOREARM

1. Radius
2. Radial styloid
3. Radial head
4. Radial neck
5. Radial tuberosity
6. Shaft of radius
7. Ulna
8. Shaft of ulna
9. Ulnar styloid
10. Head of ulna
11. Wrist joint
12. Elbow joint
13. Coronoid process
14. Olecranon process
15. Trochlear notch (semilunar notch)
16. Humerus
17. Trochlea
18. Capitulum
19. Medial epicondyle
20. Lateral epicondyle

ELBOW

1. Radius
2. Radial head
3. Radial neck
4. Radial tuberosity
5. Shaft of radius
6. Ulna
7. Shaft of ulna
8. Elbow joint
9. Coronoid process
10. Olecranon process
11. Trochlear notch (semilunar notch)
12. Humerus
13. Trochlea
14. Capitulum
15. Medial epicondyle
16. Lateral epicondyle

HUMERUS

1. Glenoid fossa
2. Head of humerus
3. Anatomical neck
4. Greater tubercle
5. Lesser tubercle
6. Surgical neck
7. Shaft of humerus
8. Trochlea
9. Capitulum
10. Medial epicondyle
11. Lateral epicondyle

SHOULDER/CLAVICLE

1. Humerus
2. Head of humerus
3. Anatomical neck
4. Greater tubercle
5. Lesser tubercle
6. Surgical neck
7. Scapula
8. Glenoid fossa
9. Acromion process
10. Coracoid process
11. Acromioclavicular joint
12. Clavicle

TRAUMA UPPER EXTREMITY – NON SHOULDER

As previously described
TRAUMA SHOULDER (Y, TRANSTHORACIC or AXILLARY)

1. Humerus
2. Head of humerus
3. Anatomical neck
4. Greater tubercle
5. Lesser tubercle
6. Surgical neck
7. Scapula
8. Glenoid fossa
9. Acromion process
10. Coracoid process
11. Acromioclavicular joint
12. Clavicle

CERVICAL SPINE (Competency must include a minimum of 4 projections)

1. Number of cervical vertebra
2. Body
3. Transverse processes
4. Laminae
5. Pedicles
6. Spinous Processes
7. Vertebral Prominens
8. Intervertebral disc space
9. Atlas - lateral masses
10. Axis - dens, body, articular processes
11. Zygaphophyseal Joints
12. Inferior/Superior Articular Processes
13. Intervertebral foramina
14. Ribs
15. Occipital bone
16. Occlusal surface

THORACIC SPINE (AP & Lateral)

1. Number of thoracic vertebrae
2. Body of vertebrae
3. Ribs
4. Transverse process
5. Laminae
6. Spinous processes
7. Intervertebral spaces
8. Intervertebral disc
9. Intervertebral foramen

LUMBAR SPINE (AP, Lat, & Lateral spot)

1. Body of vertebrae
2. Transverse process
3. Sacrum and SI joints
4. Spinous processes
5. Zygaphophyseal joints
6. Intervertebral disc
7. Intervertebral foramen
8. Pedicle
9. Laminae
10. Number of lumbar vertebra
11. L-5
12. S-1
13. Sacral promontory
14. Iliac crests

CONTRAST ENEMA

1. Cecum
2. Ascending colon
3. Hepatic flexure
4. Transverse colon
5. Splenic flexure
6. Descending colon
7. Sigmoid
8. Rectum
9. Anus
10. Appendix
11. Small bowel
12. Haustra
EMORY DIAGNOSTIC RADIOLOGY PROTOCOLS

General
1. Tight Collimation expected on all images
2. No unprocessed images
3. Appropriate Masking
4. Standard display positions
5. Right and Left Separate within studies
6. Remove clothing in field of view to remove artifacts
7. Mandatory Right and Left marking with personal markers (non electronic)

Portable Chest Exam Protocol
1. Patient as upright as possible
2. 72 inch distance if possible – indicate in notes what distance was used.
3. All portable chest exams should be sent to PACS with both the standard chest image and the line-enhanced image.
   a. If you are using the Carestream units you will automatically get both images.
   b. If you are using the Fuji equipment you will have to send the normal chest x-ray and then reprocess the image under the “Chest Portable PICC” processing selection and send that image also.

MSK Procedure Protocols  Rev. 3/15
Left and right extremities to be done separately. All long bone exams to include both joints

Upper Extremities:

Finger:
1. PA hand
2. Oblique of affected finger
3. Lateral of affected finger

Hand: Left and right to be done separately except for arthritis studies, “ball-catcher’s” oblique OK for arthritis study
1. PA
2. Oblique
3. Fan lateral

Wrist:
1. PA
2. Oblique
3. Lateral

Forearm:
1. AP
2. Lateral

Elbow:
1. AP
2. Oblique - lateral rotation
3. Lateral

Humerus:
1. AP
2. Lateral

Shoulder:
1. AP internal rotation
2. AP external rotation
3. Axillary (alternate: scapular “Y” if axillary not possible)

Clavicle:
1. AP
2. AP axial with 15° cephalic angulation

Scapula:
1. AP
2. Lateral ( Y view )

AC Joints:
1. AP (standing with weights)
2. AP (standing without weights)
Lower Extremities:
Toes:
1. AP foot
2. Oblique of affected toe
3. Lateral of affected toe

Foot:
1. AP
2. Oblique - internal rotation
3. Lateral

Ankle:
1. AP
2. Oblique (mortise)
3. Lateral

Heel / calcaneus:
1. Axial
2. Lateral

Pelvis and Hips
Pelvis:
1. AP

Hip:
1. AP Pelvis
2. Lateral / frog leg of affected Hip

Tibia / Fibula:
1. AP
2. Lateral

Knee:
1. AP
2. Oblique - internal rotation
3. Lateral
   - 10° to 15° flexion
(4. Include sunrise if ordered)

Femur:
1. AP
2. Lateral

ED/Trauma Hip:
1. AP Hip (affected hip only)
2. Lateral Hip (Frog or Cross-Table affected only)

Sacroiliac Joints:
1. AP
2. AP axial with 40° cephalic angulation

Pelvis post-arthroplasty:
Include entire femoral stem

Spine
C-spine (standard order):
1. AP
2. Odontoid
3. Lateral (swimmers if necessary)
4. Obliques - bilateral
(5. Flex & ext if ordered)

L-spine:
1. AP
2. Lateral
3. L5 – S1 spot
(4. Obliques – bilateral if ordered)

Sacro / Coccyx:
1. AP sacrum
2. AP coccyx
3. Lateral sacrum/coccyx

Scoliosis:
Per physician orders
Miscellaneous Exams

Bone age study:  
1. PA *left* hand including wrist

Ribs:
1. PA Chest  
2. PA upper ribs  
3. AP lower ribs  
4. Bilateral PA obliques

Arthritis Survey:  Right and left extremities to be done separately  
1. AP, Lateral, and Oblique hands  
2. AP, Lateral, and Oblique feet  
3. AP axial Pelvis – Ferguson (15° cephalic angulation)

Bone Length Study / Scanagram
1. Patient supine on table

Metastatic Survey  
(See Axial Skeletal Survey)

Axial Skeletal Survey with Long Bones:  
1. Skull lateral (include C-spine)  
2. PA upper ribs  
3. AP lower ribs  
4. Pelvis  
5. Bilateral AP femur  
6. Bilateral AP tibia / fibula  
7. AP Humerus  
8. AP forearm  
9. Lateral L-spine  
10. Lateral T-spine  
11. Swimmers
DX Hanging and Sequence Protocol

**Hanging Guidelines:**
- Images should be displayed in anatomical position
- Lateral chest and spine images should face the viewer’s LEFT

**Sequence Guidelines:**
- Images should appear in AP, OBL, LAT order regardless of acquisition order
- Bilateral exams should group all RIGHTS together, then all LEFTS together

**Need to edit your images in PACS?**

<table>
<thead>
<tr>
<th>FLIP</th>
<th>SAVE CHANGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROTATE</td>
<td>DRAG &amp; DROP</td>
</tr>
</tbody>
</table>

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SECTION VII: CLINICAL GRADING SYSTEM

Each semester the clinical grade is comprised of a work ethic grade and the satisfactory completion of assignments. Each student begins each semester with a grade of A.

FIRST SEMESTER:
All clinical orientation sessions, tours, observations, and clinical wrap up are mandatory and must be made up if students are absent. Failure to do so will result in a one letter grade deduction/session missed and not made up. Absences are considered unexcused unless accompanied by appropriate documentation and turned into the clinical coordinator upon returning to campus. Students must be punctual to these sessions, failure to be on time will also affect the clinical grade.

- **Work Ethic and Attendance grading scale**
  - Perfect Attendance with 0 – 1 tardies = A
  - Unexcused absences will result in a 1–letter grade deduction per occurrence.
    - Students that are more than 10 minutes late to any mandatory clinical orientation session will be considered absent.
  - Any clinical time or orientation class missed must be made up. Failure to do so will prevent the student from registering for the next clinical course and failure of the current clinical course.
  - Tardies, Dress code violation, No call late, failure to follow the schedule
    - 0 – 1 = no penalty
    - 2 – 3 = 1 letter grade deduction
    - 4 – 5 = 2 letter grade deduction
    - 6 – 7 = 3 letter grade deduction
    - Greater than 7 = F
  - Leaving the clinical site without permission or No Call No Show
    - 1 letter grade deduction

- **Assignment grading scale**
  - 88 or better = No letter grade deduction
  - 78 – 87 = 1 letter grade deduction
  - 73 – 77 = Two letter grade deduction
  - < 73 = Three letter grade deduction

Grade Examples:
Scenario 1
Student attended all Mandatory orientation sessions
Student attended all clinical observations
Student was tardy once to an observation
Student made up the time missed from being tardy.
Student had an average grade of 91 on their clinical assignment.
**Final Clinical Grade = A**

Scenario 2
Student attended all Mandatory orientation sessions
Student attended all clinical observations
Student was tardy twice to an observation
Student made up the time missed from being tardy.
Student had an average grade of 88 on their clinical assignment.
**Final Clinical Grade = B**
Scenario 3
Student attended all Mandatory orientation sessions
Student attended all clinical observations
Student was tardy twice to an observation
Student made up the time missed from being tardy.
Student had an average grade of 82 on their clinical assignment.
Final Clinical Grade = C

SECOND THROUGH EIGHTH SEMESTERS:
If the student receives 4 or less demerits (5 in the eighth semester), informs the program and clinical site of any absences, completes required competencies and interval checks, satisfactorily (≥88) completes all assignments for the semester, and maintains the programs professional and personal conduct standards, the student will maintain an A.

• Work Ethic Grade: The work ethic grade encompasses
  • Attendance
  • Dress code
  • Tardiness
  • Missing no more than half of a rotation through an area.
  • Leaving the clinical site without permission
  • Proper notification of clinical absences or tardiness

A student will receive:
• 1/2 demerit for each dress code violation after one warning.
• 1/2 demerit for failing to call prior to the scheduled shift in the event of an absence or tardy over 30 minutes. (No call late.) This is in addition to the demerit for being tardy.
• 1/2 demerit each for their second, third or fourth tardy (The first tardy each semester will be exempt from the demerit schedule, however the time missed will be included in clinical time missed.)
• One demerit for each tardy over four.
  o Students will be considered tardy any time they come in to clinical later than their normal scheduled time unless they have informed both the site and faculty before 3p the previous business day (M-F).
• One demerit for leaving the clinical site without permission. (LWP) Students must inform both the site clinical instructor/supervisor AND the program.
• One demerit for failing to call both the clinical site and the program office in the event of an absence.
• One demerit for each four hours of clinical time missed. This includes time missed due to absences, tardiness, leaving without permission, dress code violations, and appointments during clinical, etc. Time will be rounded up to the nearest four hours.
• In addition to the grade penalties, students missing greater than 24 hours/semester will be required to make up that time during the semester break provided they have passed the clinical course. If the student fails to complete the make up time over the semester break, their registration for clinical for the next semester will be cancelled and the student will receive a grade of “F” in clinical. In the event this occurs in the last semester the student will receive an “Incomplete” grade in clinical and will not graduate until the time is made up. Incompletes must be removed from the student’s record within one year or they will convert to an “F”.
• Two demerits for missing more than half of a rotation.
• A letter grade drop each time the student fails to inform either the clinical site or the program office in the event of an absence. A no call no show demerit occurs when a student fails to
inform the clinical coordinator, clinical supervisor, or clinical instructor. The student must inform the appropriate personnel in advance of the scheduled shift.

0 - 4 demerits results in no letter grade drop
4.5 - 6 demerits results in one-letter grade drop
6.5 - 8 demerits results in two-letter grade drop
8.5 - 10 demerits results in three-letter grade drop
>10 demerits results in failure of the clinical course

Demerits will not be given in the event of serious illness of the student or the death or serious illness of immediate family members. Immediate family members include spouse/significant other, child, parent, sibling or grandparent. Verification of death or illness will be required within one week upon return to clinical. Time missed will be made up over the semester break, observed holiday and/or at the discretion of the program faculty and clinical affiliate. Extraordinary circumstances will be looked at on a case-by-case basis. In the event the student does not wish to make up the clinical time missed, the absences will be counted as a regular absence and the demerit schedule will apply.

Approximately sixteen hours is built into each semester II – VII to account for illness or emergencies. It is recommended the student refrain from missing clinical unless an emergency occurs or the student is ill.

In the final semester students are given an additional 4 hours of personal time in general clinical. The demerit schedule is

0 - 5 demerits results in no letter grade drop
5.5 - 7 demerits results in one-letter grade drop
7.5 - 9 demerits results in two-letter grade drop
9.5 - 11 demerits results in three-letter grade drop
>11 demerits results in failure of the clinical course

Professional suitability and conduct requirements will also impact the clinical grade as discussed in previous sections.

- **Assignment Grade:** Assignments include
  - Competencies - Regular & Final
  - Film Critique
  - Student Clinical Evaluations
  - Performance objective checklists
  - Interval checks
  - Intercultural Workshops/Discussions
  - Written assignments
  - Notebook
  - Quizzes
  - Seminars/Directed readings
  - Other

Not all assignments will occur in every semester. They will be outlined in the clinical syllabus.

**Regular Competencies:**
- Students must obtain at least an 80 on all regular competencies to pass the competency.
- Any Unsatisfactory in any category negates the competency.
- Failure to complete the required number of competencies in a semester as outlined on each clinical syllabus will result in a letter grade reduction per competency short. Students may request additional clinical time during the program's final exam week or first week of the semester break to complete required competencies. The student will be scheduled at the discretion of the program faculty and clinical affiliate. This will only be allowed one time during the program; after that the
time is volunteer time and any applicable assignments will be applied to the next semester.

- Certain competencies are required and must be completed to graduate.

**Final Competencies:**
- Students must obtain at least a 90 on all final competencies to pass the competency.
- Failure to complete the required number of final competencies in a semester as outlined on each clinical syllabus will result in a letter grade reduction per competency short.
- All final competencies must be completed satisfactorily before the student will be allowed to graduate.

**Image Critiques:**
Faculty members conduct image critiques. Students are asked various questions on certain exams. Image critiques are based on the following scale:

**An average of**
- 88 or better = No letter grade drop
- 78 – 87 = One-letter grade drop
- 73 – 77 = Two-letter grade drop
- <73 = Three-letter grade drop

*(A student will maintain their current clinical grade unless they fall below an 88.)*

**Student Clinical Evaluations:**
Technologists and faculty members complete student Clinical Evaluations. They are done to identify student’s strengths and areas in need of improvement. They are based on the following scale:

**An average of**
- 88 or better = No letter grade drop
- 78 – 87 = One-letter grade drop
- 73 – 77 = Two-letter grade drop
- <73 = Three-letter grade drop

*(A student will maintain their current clinical grade unless they fall below an 88.)*

**Performance objectives, Written assignments, Intercultural Workshops, Interval checks, Notebook, Quizzes, Seminars/Directed Readings, etc.** are assigned each semester. They are averaged and based on the following scale:

**An average of**
- 88 or better = No letter grade drop
- 78 – 87 = One-letter grade drop
- 73 – 77 = Two-letter grade drop
- <73 = Three-letter grade drop

*(A student will maintain their current clinical grade unless they fall below an 88.)*

CE requirements will be as follows: 200 total points available, Seminars = 100 points for 1 hour Directed Readings = 25 points each regardless of CE value indicated on source.

If all Interval checks are completed a score of 100 is averaged into the assignment grade. If the required number of interval checks are not completed by the end of the clinical semester a percentage of completed/required is averaged into the assignment grade.

**Other**
Occasionally other assignments may be deemed necessary. Students will be notified of them in advance. Students will also be notified of the affect of these assignments if they differ from the current assignment scale.
Grade Examples:
Scenario 1
Student used 16 hours of Personal time = 4 demerits
Student was always on time to clinical.
Student completed all required Competencies
Student had an Evaluation Average of 93
Student had an Assignment Average of 90
Final Clinical Grade = A

Scenario 2
Student used 16.5 hours of Personal time = 5 demerits
Student was tardy twice = ½ demerit
Student completed all required Competencies
Student had an Evaluation Average of 93
Student had an Assignment Average of 90
Final Clinical Grade = B

Scenario 3
Student used 8 hours of Personal time = 2 demerits
Student was tardy three = 1 merit
Student completed all required Competencies
Student had a film critique grade of 82 = 1 grade drop
Student had an Evaluation Average of 84 = 1 grade drop
Student had an Assignment Average of 95
Final Clinical Grade = C
SECTION VIII: PROTECTION POLICIES

ACCIDENTS
All accidents that occur while on Clinical Assignment resulting in patient, hospital personnel, or personal injury and/or damage to equipment must be reported immediately to the Clinical Supervisor and Program Director. An accident (INCIDENT) report must be filed at the site if the incident so warrants.

Students should report to Student Health for minor injuries but should report to an Emergency Room if the injury is serious. The student will be responsible for all fees. For after hours care, call Student Health at 404-727-7551 and follow the instructions given.

1. For serious injuries call applicable emergency number or go straight to the emergency room.
2. For minor injuries call Student Health immediately 404-727-7551 and follow their instructions.
3. For exposure to infectious diseases follow the procedure outlined below.
4. Some sites may have the student seen by employee health.
5. Students will fill out an incident report/STARS report as instructed by supervisor. Students are generally considered visitors, not employees.
6. All injuries, accidents, needle sticks etc., must be reported to the Program Director and Clinical Coordinator as soon as possible.

INFECTION CONTROL POLICY
Students will not be permitted to participate in the care of any patient infected with Ebola or similar diseases.

Any needle sticks, contact with blood/body fluids, exposure to TB or other infectious diseases must be reported to the supervisor at the clinical site, the Program Director and Student Health (404-727-7551). The following protocol applies:

Infection Control Protocols

Needlesticks and Other Blood/Body Fluid Exposures

1. Learn and always observe Standard Precautions (Universal Precautions).
2. If you have an exposure to blood or other body fluids (e.g., needle stick, cut), immediately clean the wound with soap and water.
3. Exposed oral and nasal mucosa should be decontaminated by vigorously flushing with water. Exposed eyes should be irrigated with clean water or sterile saline. Eyewash facilities can be accessed quickly in the emergency department for each hospital.
4. Follow the protocol of the hospital in which the incident occurred to the fullest including all follow-up (through the hospital’s Employee Health Service). It is especially important that you report your exposure to the hospital’s Employee Health Service as soon as possible so that a timely evaluation can be performed. Additionally, your exposure may guide future preventive efforts (e.g., education, training, selection of devices). If prophylactic medications are indicated, it is recommended they be initiated as soon as possible after the exposure, ideally within two hours.
5. If you are uncertain of the procedures for reporting and obtaining care at the facility where your exposure occurred, call the Woodruff Health Sciences (WHSC) Needlestick Hotline for assistance at 404-727-4736.

6. Acute serology should be drawn to establish one’s baseline antibody titers to hepatitis B virus (if you have not previously been determined to be HBsAb positive [immune to Hepatitis B]) and, if indicated, to HIV and/or Hepatitis C Virus [HCV] (if the source patient is HIV-positive or HCV-positive).

7. Depending on the results of one’s serology and the baseline serology of the patient (from which the incident occurred), you may need follow-up serologies as per the hospital protocol where the injury occurred.

8. If the source patient is HIV-infected, the administration of post-exposure prophylaxis (PEP or “prophylactic” antiretroviral medications) to decrease the risk of patient-to-healthcare worker transmission should be strongly considered. Medications may be initiated pending results of HIV serology on the source patient. If used, these medications should be taken as soon as possible after the needlestick injury. Each hospital has a protocol and will counsel you and give advice as needed. PEP regimens are complicated; therefore, be sure that the individual who manages your exposure consults with the Hospital Epidemiologist (see list below).

9. Again, call the WHSC Needlestick Hotline 404-727-4736 if you have any questions about management of the needlestick or other occupational exposure.

10. The following list of specific areas and/or individuals should be contacted at the facility in which the exposure occurs:

Contacts for Infection Control Protocol

Emory University Hospital - Midtown
- Daytime hours, Monday thru Friday (7 am to 4 pm):
  - Employee Health Service 404-686-2352
- After hours, and on weekends:
  - Healthcare worker calls Exposure Pager (PIC 11917) or calls the WHSC Needlestick Hotline (404-727-4PEM).
  - If WHSC Needlestick Hotline called, the on-call OIM nurse practitioner will be paged (PIC 50464). The Occupational Injury Management (OIM) nurse practitioner will facilitate immediate post-exposure care. Healthcare worker should go to OIM during the next business day to have baseline labs drawn.

Other contacts at Midtown:
- Jesse Jacob, MD – cell: 404-402-5110
- If you are unable to reach any of the above individuals, call the WHSC Needlestick Hotline 404-727-4736.

Emory University Hospital
- Daytime hours, Monday thru Friday (7 am to 4 pm)
- Employee Health/Occupational Injury Management Office
- 1364 Clifton Road, Room D219
- Occupational Injury Management (Worker’s Compensation) 404-686-8587 Employee Health Services 404-686-8589
After hours and on weekends:
Healthcare worker calls **Exposure Pager (PIC 13084)** or calls the WHSC Needlestick Hotline (404-727-4PEM). If WHSC Needlestick Hotline called, the on-call OIM nurse practitioner will be paged (PIC 50464). The OIM nurse practitioner will facilitate immediate post-exposure care. Healthcare worker should go to OIM during the next business day to have baseline labs drawn.

Other contacts at EUH:
- Jay Varkey, MD – PICC 12084
- **If you are unable to reach any of the above individuals, call the WHSC Needlestick Hotline 404-727-4736.**

Children's Healthcare of Atlanta (CHOA) (Egleston or Scottish Rite)
- Any needlestick or bloodborne pathogen exposure is referred to the **24/7 hotline 404-785-7777.** This is staffed by an employee health nurse who will provide guidance to students.
- Employee Health Digital Pager 1-800-682-4549 or Needlestick Hotline (ext. 4444 at Egleston and ext. 82444 at Scottish Rite)
- Other contacts at CHOA: (if students cannot reach employee health nurse via hotline or pager)
  - Andi Shane, MD – cell: 404-354-7692 or office 404-727-9880
  - Infectious Disease Service Team on Call – pager: 404-785-7778
- **If you are unable to contact any of the above individuals, call the WHSC Needlestick Hotline 404-727-4736.**

Financial considerations of accidental needlesticks
The cost of the follow-up and necessary medications may be borne by Emory University Affiliated Hospitals or may need to be submitted through the student’s health insurance. Any uncovered costs will be covered through the Office of Medical Education & Student Affairs if the procedures outlined above are followed.

For medical students and students in the health professions, initial evaluation of the exposure should be as explained above. Following this initial evaluation, all incidents and follow-up for exposures occurring at a hospital should be reported by the student within 4 days to the Registrar, **Ms. Mary Kaye Garcia 404-712-9921.**

Conversions
PPD tuberculin skin tests will be performed every year (at a minimum) or at the time of exposure for medical students. Those with PPD conversions will be referred to an appropriate physician in the University Health Services for follow-up. Expense of drugs, x-rays, and laboratory testing will be covered as long as protocol is followed.

Students Infected with HIV, Hepatitis B, Hepatitis C
Emory University School of Medicine requires any student who is infected with Human Immune Deficiency Virus (HIV), Hepatitis B virus “e” antigen positive, or Hepatitis C virus to notify the Executive Associate Dean for Medical Education and Student Affairs of his/her positive status so that the School may help to define any limitations necessary on clinical rotations and make such accommodations as may be reasonable to permit the student’s continued matriculation.

The Executive Associate Dean for Medical Education and Student Affairs, or his/her designee, will make recommendations for students continued education on a case-by-case basis, utilizing the best currently available scientific knowledge and any established recommendations from the U.S. Centers for Disease Control and Prevention and other applicable governmental guidelines regarding what, if any, limitations need to be applied to clinical activity for persons with the given condition. In conducting this evaluation and making such recommendations, the Executive Associate Dean will consult with the student, the
student’s personal physician, student affairs deans and others, including faculty of the School of Medicine, as determined appropriate to assist in this individualized judgment. Within the parameters of existing law, the student’s confidentiality will be maintained during this process.

Reasonable efforts to assist the student in completing the requirements for an M.D. degree will be made by the School of Medicine. In addition, the student will be offered counseling concerning the options for the future selection of a career pathway in the profession of medicine.

**More Specific Guidelines on Students Infected with Blood-Borne Pathogens**

Students should be allowed to complete the M.D. degree if at all possible with an effort by all to maintain confidentiality to the degree that it is possible.

In such instances, the clinical department chairs need not be notified of the name of an individual student involved or the type of blood-borne pathogen involved. However, the Clerkship Director for the Departments of Surgery, Obstetrics/Gynecology, Emergency Medicine and any other Clerkship Directors (if indicated) will be informed of the name of the individual student so that any special assignments can be made if indicated. If the student is Hepatitis B “e”-antigen positive, the Clerkship Director will be given that data.

Students will be carefully counseled concerning their potential risk to patients and their risk to themselves. They will be instructed to be punctilious in the use of universal precautions and up-to-date hospital infection control techniques. They will be referred to appropriate physician caregivers for optimal follow-up and therapy. The student will also be counseled carefully about future career plans based on current medical and legal data.

Invasive procedures considered as potential risks for health care workers-to-patient transmission by the Centers for Disease Control and Prevention will be strictly avoided by students who are Hepatitis B “e”-antigen positive. Students with other known blood-borne pathogens will be advised on a case-by-case basis. In general, because of their lack of experience, students with HIV or HCV infections will be advised like HBV-infected students. Recommended practices include double gloving and not performing any procedures that have been previously identified as associated with a risk of provider-to-patient HBV transmission.

The student will be allowed to withdraw without penalty from any clinical setting that the student feels might present a risk for infectivity.

HIV-positive students should undergo screening for Tuberculosis every six to twelve months and receive pneumococcal vaccine, annual influenza vaccine, and other appropriate preventive immunizations.

The student’s condition will be re-evaluated at least annually by the Executive Associate Dean for Medical Education and Student Affairs to determine if any additional limitations are indicated. The student’s viral load, CD4 count and clinical status as well as the regimen of anti-retroviral therapy that is being employed can be useful in assisting in any decision making by the medical school if the student will allow the Executive Associate Dean to discuss the results with his/her healthcare provider.

Students who fail to show a response to Hepatitis B vaccination by serologic means will be counseled to see a physician to determine their Hepatitis B antigen status and to see if they are Hepatitis B “e”-antigen positive. If they are “e”-antigen positive, they will be encouraged to report this finding to the Office of the Executive Associate Dean, Medical Education & Student Affairs and then to be followed as per protocol.

**Last modified:** 7/27/2016
LABORATORY SAFETY POLICY

Students will be required to participate in laboratory procedures throughout the course of study. To insure the safety of all students, the following laboratory rules must be followed. Failure to comply may result in disciplinary action.

1. Laboratory use is restricted to only those students enrolled in the Medical Imaging Program who have completed a laboratory orientation session.
2. Laboratory use is restricted to educational assignments only.
3. The laboratory will be open during regular program business hours. A faculty member must be present in the program office, lab or classroom while the students are in the laboratory.
4. Students will not allow non medical imaging program individuals in the lab.
5. General safety rules (use of electrical equipment, hazardous materials precautions, etc.) must be followed when utilizing the laboratory.
6. The door entering the laboratory must be closed during a radiographic exposure.
7. Warm-up procedures must be completed before any experiment or practice exposures are made.
   a. Three exposures of 80 kVp, 200 mA, 1 second, large focal spot.
8. All persons must go into the control area or darkroom with the door closed during a radiographic exposure.
9. All students must wear radiation-monitoring devices during all labs requiring an exposure.
10. Only phantoms or non-living objects may be used as subjects when actually performing an experiment or practice examination. X-raying live subjects in the lab or for lab experiments will result in expulsion from the program.
11. Care must be taken in the handling of phantoms. They are heavy and very expensive. Students must report any damage to the program faculty. Failure to do so may result in immediate dismissal.
12. Phantoms may only be used in the laboratory, they may not be checked out for use in other areas except during Imaging Equipment class. The students must check out the equipment from the course instructor and return them the same day.
13. Care must be taken in the handling of all other equipment and supplies.
14. All items must be returned to their designated place in the laboratory after use.
15. Students are responsible for the proper use of the processor.
   a. Water and power will be turned on to use.
   b. Water and power will be turned off after use.
   c. The lid to the processor will be propped open when the processor is off.
   d. Chemistry will be changed when needed.
   e. Feed tray is washed off.
   f. Crossover rollers cleaned DAILY by the last student using the lab.
16. Student radiographs must either be submitted to the appropriate faculty member or placed in the reject film container.
17. The laboratory must be kept neat and clean. Students are responsible for maintaining the laboratory when performing experiments or practice procedures.
   a. Cassettes shall be refilled and returned to the cassette credenza in the control area.
   b. The film bin shall be kept full and organized.
   c. Trash shall be discarded in an appropriate trash container.
   d. Safelights and overhead lights shall be turned off or unplugged when leaving the lab.
   e. After use, the table and upright bucky will be cleaned with antiseptic solution.
18. Any non-functioning equipment must be reported to a faculty member as soon as possible.

*These rules apply to all radiographic rooms that are used for any lab assignments.
**PREGNANCY POLICY**

**Disclosure of pregnancy is voluntary. Students are not required to declare pregnancy.**

The National Council on Radiation Protection (NCRP) recommends a total dose equivalent limit (excluding medical exposure) of 0.5 rem (5 mSv) for the embryo-fetus. Once a pregnancy becomes known, exposure of the embryo-fetus shall be no greater than 0.05 rem (0.5 mSv) in any month (excluding medical exposure).

For purposes of radiation protection, it is **recommended** by the National Council on Radiation Protection (NCRP) that persons involved in the use of ionizing radiation notify program officials immediately if pregnancy is suspected. It is possible to limit occupational exposure to less than 0.5 rem per entire gestation period and prevent exceeding embryo-fetal dose equivalent limits through personnel monitoring, proper radiation safety instruction, and adherence to all radiation safety policies. In accordance with the NRC recommendations, the Medical Imaging Program at Emory University requests any student who suspects a pregnancy to notify the program faculty immediately.

As soon as a student confirms that she is pregnant, it is **recommended** that she notify the program faculty. Should the student choose to declare her pregnancy, she must do so, in writing, to the Radiation Safety Officer and submit documentation from her physician verifying her pregnancy and the expected delivery date. The Radiation Safety Officer will review the student’s past exposure history, determine if radiation restrictions should be applied and counsel the student. A copy of the document "Guide for Instruction Concerning Prenatal Radiation Exposure" will be given to the individual as required by the State of Georgia, NRC, and OSHA. The student will sign documentation that this information has been received.

Following a declaration of pregnancy and counseling by the Radiation Safety Officer, the student must notify the program faculty, in writing, within ten working days of her decision on one of the following options:

1. Termination of enrollment in the program.
2. Withdrawal from the program for a period of one year after completion of the current semester with **routine assignments** in fluoroscopy, portables, surgery, and special procedures. The Radiation Safety Officer will issue a monthly fetal monitor for the individual to wear in addition to her regular dosimeters.*
3. Withdrawal from the program for a period of one year after completion of the current semester with **limited assignments** in fluoroscopy, portables, surgery, and special procedures. The Radiation Safety Officer will issue a monthly fetal monitor for the individual to wear in addition to her regular dosimeters.*
4. Withdrawal from the program for a period of one year without completion of the current semester.*
5. Deceleration to part-time status with withdrawal from clinical course work.*
6. Continuation of full-time status with reassignment of rotations** (as requested by the student) coordinated with the clinical coordinator. The Radiation Safety Officer will issue a monthly fetal monitor for the individual to wear in addition to her regular dosimeters.***
7. Continuation of full-time status without reassignment of rotations. All clinical and didactic duties and assignments must be performed as usual. The Radiation Safety Officer will issue a monthly fetal monitor for the individual to wear in addition to her regular dosimeters.

If a student chooses to withdraw from the program for one year, she must notify the program director of her intention to return to the program. Readmission will be based on space availability and the student’s previous academic standing. It is understood that, upon her return, all clinical competencies and clinical rotations missed must be completed.
Withdrawal from the program for greater than one year will require the student to reapply in accordance with standard admissions procedures.

The student may revoke the Declaration of Pregnancy at any time if she believes that it is in her best interest to do so, and the lower dose limit for the embryo/fetus would no longer apply.

This policy is printed in the Clinical Handbook, discussed with all applicants prior to acceptance into the program, and reviewed with the entire class upon enrollment in the program. All prospective students are required to sign a form indicating their knowledge and understanding of this policy. This form is kept on file with the students' applications.

* Options 2-5 automatically extend the program of study by one full year.
** The program will make every effort to reassign the student as requested; however, the student must realize that reassignment may not be possible.
*** Option 6 may extend the program of study.

RADIATION MONITORING
In order to insure proper precautions against radiation accidents, all staff members and students are provided with dosimeters for radiation monitoring. It is recommended that the body badge be worn at the waist level along the midline of the body. The collar badge should be worn near the neck and outside of the fluoroscopy apron during fluoroscopy procedures.

Students must always wear dosimeters while on clinical assignment and when making an exposure in the lab. Dosimeters are changed around the 8th working day of each month and should be brought to the program office for exchange.

To further insure radiation safety practices, all radiography students will go through an annual radiation safety update.

RADIATION PROTECTION POLICY
The goal of radiation protection is to limit the probability of radiation induced diseases in persons exposed to radiation and in their descendants to a degree that is acceptable in relation to the benefits from the activities that involve such exposure. Each student is required to exercise sound radiation practices at all times to insure safe working conditions for physicians, staff, faculty, other students and patients. Failure to comply with the Radiation Safety Standards may be grounds for disciplinary action or dismissal from the Program.

RADIATION SAFETY STANDARDS

1. Dosimetry
Students in the Medical Imaging Program shall be issued dosimetry in accordance with Emory’s “Occupational Exposure and Personnel Monitoring Program.” (http://www.ehso.emory.edu/content-guidelines/OccupationalExposure_PersonnelMonitoring.pdf) Accordingly, students will be assigned collar and body dosimeters for administrative purposes, unless screening review shows an ALARA level has been received. The body dosimeter shall be worn on the inside of the lead apron and the collar dosimeter shall be worn on the outside of the lead apron near the head.

Dosimeters are obtained from the Program faculty at the beginning of each month. Dosimeters must be returned to the Radiation Safety Officer by the tenth day of each month and it is the student's
responsibility to exchange the dosimeters in the Program office by the 8th of the month. Failure to turn in both dosimeters by the required date may result in disciplinary action and the assessment of a late fee.

Dosimeters will be processed on a scheduled monthly basis. The handling and processing of dosimeters is the responsibility of the Radiation Safety Officer. In the event that an overexposure is suspected, it is the responsibility of the student to notify Program faculty and the Radiation Safety Officer.

Permanent records of dosimeter readings will be maintained by the Radiation Safety Officer. The Program will keep exposure records for each student during their tenure in the program. All students will be required to initial dosimeter reports on a monthly basis. Students may request access to their records at any time. Should any student receive more than 50 millirem in any month, the student will be immediately counseled by a Program faculty member regarding radiation protection practices. An annual report of exposure will also be provided to each student by the Radiation Safety Officer.

Lost or damaged dosimeters must be reported immediately to the Program faculty. A replacement dosimeter will be obtained from the Radiation Safety Officer as soon as possible. Students who repeatedly lose or damage their dosimeters will be assessed a fee for each dosimeter damaged or lost.

2. Use of Radiation-Producing Equipment
Students shall follow the guidance in the Emory Healthcare “Radiation Safety Policy for Use of X-rays, Computed Radiography (CR), Digital Radiography (DR) and Fluoroscopy on Patients and Human Subjects.” Accordingly, protective (lead) aprons shall be worn by students within the room during mobile radiography, radiography, and fluoroscopic procedures, both within the laboratory and within the clinical environment.

- The operator must keep exposures as low as reasonably achievable and must use minimum exposure factors necessary for the exam being performed. Fluoroscopic work shall be performed in the minimum time possible using the lowest dose rate and the smallest aperture consistent with clinical requirements.
- The operator must never expose himself to the direct beam, and must not stand within one meter of the tube or irradiation target while the unit is in operation unless adequately shielded. The operator must make full use of protective barriers, lead aprons, gloves and lead glasses whenever practical.
- The student must not hold image receptors during an exposure.
- The student should not hold patients when an immobilization method is appropriate.
- The hand of the operator should never be placed in the useful beam unless the beam is attenuated by the patient and a protective leaded glove is worn.
- During the operation of mobile and dental units, the operator should stand as far as possible from the tube and patient during exposure, and should wear a protective apron, or step behind an adequate shield.
- Rotation of operators or the use of portable shields is recommended for heavy workloads.
- Shutter mechanisms and interlocking devices should not be tampered with and shall be inspected at frequent intervals to insure proper operation.
- The operator should insist that all nonessential personnel leave the exposure area before operating the unit and that all essential personnel be adequately shielded.
- The operator must observe any restrictions in the use of the x ray machine recommended by the Radiation Safety staff.
- The operator must notify their supervisor and the Radiation Safety Officer immediately of any accidental exposure to radiation to staff.
• The useful x-ray beam shall be limited to what is necessary for the examination being performed and shall in no instance exceed the dimensions of the image receptor. Evidence of proper collimation and/or shielding should appear on all radiographs.
• The cumulative radiation timer is to be reset at the beginning of each fluoroscopic procedure. Thereafter, it will be reset only after it has completely run out of time and the audible signal has sounded.
• Students shall not take exposures on another student in the lab or clinical site.
• Students must perform all procedures under direct supervision until competency has been achieved.
• Students must perform all repeat images under the direct supervision of a registered radiographer.
• A minimum of indirect supervision is required on all procedures for which the student has proven competency.

3. Pregnancy
A. Patients: All women within childbearing age will be questioned as to the possibility of pregnancy and the last menstrual date.
   • Students will notify the supervising technologist and physician of pertinent information and will follow the protocol of the clinical site in documenting the information.
B. Students: Students will operate in accordance with the Medical Imaging Program Pregnancy Policy.

REPEAT POLICY
Any repeated projection must be performed under the direct supervision of a registered technologist. To minimize radiation exposure to the patient, the technologist must observe the student to insure that the projection being repeated is performed correctly.

Students must document in e*Value under PxDx any projection that they are responsible for that requires a repeat. The technologist must verify that they watched and assisted the student with the repeated image. Repeat numbers will be checked periodically by the faculty.

Repeat documentation shall include the date, the patient’s identification number, the projection(s) repeated, the reason for the repeat, and the technologist’s verification. A minimum number will be required each semester and will be outlined on the clinical syllabus. Failure to adequately keep track of repeats will affect the clinical notebook/organization grade. Students make mistakes.

Failure to comply with the repeat policy is a violation of supervision requirements. The first offense will result in a written reprimand; additional incidents will result in suspension and dismissal from the program of study.

CLINICAL ORIENTATION
All students will orient themselves to the department the first day of their clinical rotation. Students will do this by reviewing the information on the Clinical Orientation checklist. Students must know the location of all safety equipment and the emergency phone numbers for each clinical site.

TRANSPORTATION POLICY
Transporting patients is an important task expected of all allied health professionals including radiographers. It requires acquired knowledge and skills. As such, it is a task in which students can and should be expected to participate in. Students may be expected to transport patients by all the various means such as wheelchair and stretcher. However, patient transportation should not dominate students’ daily clinical activities. Students are expected to employ proper body mechanics and standard
precautions. Students must be familiar with the emergency procedures and phone numbers of the facility in the event an emergency situation arises during transport.

Until a student demonstrates the proper techniques and skills required to safely transport patients by the various modes of transportation (wheelchair, stretcher, etc) and general knowledge of the facility, all patient transportation shall be carried out under the direct supervision of qualified registered radiographer (R.T.ART), registered nurse (RN), or other qualified healthcare professional. In addition students MUST be directly supervised and assisted in transporting all ICU patients and patients on a respirator.

Once a student has demonstrated the skills and knowledge necessary, they may transport patients without direct supervision provided a technologist, nurse, or other qualified healthcare professional has reviewed the patient’s status and mode of transportation with the student and determined such transport is within the student’s abilities. Under no circumstances is a student to transport an ICU patient or an intubated patient without supervision and assistance. Students may transport patients on oxygen and with infusion pumps. However, should an infusion pump alarm during transport the student should be able to contact a nurse or other responsible individual for immediate assistance.

**SAFETY POLICIES – MISCELLANEOUS**

Students are required to adhere to all safety policies of the clinical education settings and the program facility. Safety training is discussed and evaluated in didactic classes and during orientation.

In addition, students will be required to know emergency codes, phone numbers, crash cart locations, fire extinguisher locations, fire alarm locations, and evacuation routes. Students will carry code cards on their person in clinical at all times. These will be initially provided by the program. Students must be prepared for emergencies.

Students will also hold current certification in Healthcare Provider CPR during the duration of the program. Students must provide a copy of their card before they will be allowed to begin clinical. All students will be responsible for re-certifying before their expiration date. Students whose certification expires may not attend clinical.

Students will be tested on safety policies throughout the program of study.
SECTION IX: E*VALUE

Students are required to keep track of most of their clinical records on e*Value. www.e-value.net

Records will be tracked via the web.

- Hour Tracking – Semesters I - VIII
- Student Clinical Evaluations – Semesters II - VIII
- Evaluations of the Clinical Sites– Semesters II - VIII
- Checklists– Semesters I - VIII
- Patient exams– Semesters I - VIII
- Prerequisites– Semesters II - VIII
- Competencies– Semesters II - VIII
- Interval Checks– Semesters III – VI
- Vital Signs – Semesters II – IV
- Repeats – Semesters II – VIII
- Others may be added

The faculty members will provide training prior to the first rotations but on the following pages are screen shots and basic information about the site for Semester I documentation. Additional screen shots may be added at a later date.