Advanced Medical Imaging Technology
Student Handbook
2018-2019

Alan W. Vespie, MEd, CNMT, RT(N)
AMIT Program Director
Nuclear Medicine Program Director
Alan.Vespie@uc.edu
513-558-7497

Barry Southers, MEd, RT(R)(MR)
Magnetic Resonance Imaging Program Director
Barry.Southers@uc.edu
513-558-7415

Whitney Bowen, MEd, RT(MR), CNMT
Nuclear Medicine & MRI Clinical Coordinator
bowenwn@ucmail.uc.edu
513-558-3515

Program Fax – 513-558-4009
AMIT Program Overview & History

The University of Cincinnati offers a Bachelor of Science degree in Advanced Medical Imaging Technology to meet the evolving demands of the marketplace and to provide maximum flexibility to today’s healthcare student. After taking two years of general education courses, Advanced Medical Imaging Technology students enter the professional education curriculum. Students will combine classroom and clinical training to become competent in two or more healthcare medical imaging specialties. Upon completion of the professional curriculum, graduates are eligible to sit for national board exams, a necessity in nearly all healthcare fields.

The imaging modalities available to study are: Magnetic Resonance Imaging and Nuclear Medicine Technology.

**Magnetic Resonance Imaging**

Magnetic Resonance Imaging is the medical specialty that utilizes magnetic fields and their properties in the diagnosis of disease and the analysis of human anatomy. Training in Magnetic Resonance Imaging is twelve consecutive months in duration and will be delivered through a combination of classroom lectures, labs, and clinical site placements. Students successfully completing the curriculum will have fulfilled requirements to sit for the nationally administered board examination.

**Mission and Goals – Magnetic Resonance Imaging Program**

The goal of this program is to produce competent, multi-skilled, Magnetic Resonance Imaging technologists. Graduates of this program will have obtained the level of didactic and clinical training necessary to meet eligibility requirements for national board examinations in Magnetic Resonance Imaging. While passage of these examinations are up to the individual and therefore cannot be guaranteed by the program, it is the program’s goal to supply each graduate with the necessary level of training and experience to adequately prepare for these examinations.

**Nuclear Medicine Technology**

Nuclear Medicine Technology is the medical specialty that utilizes stable and radioactive isotopes in the diagnosis and treatment of disease. Training in Nuclear Medicine Technology is twelve consecutive months in duration and will be delivered through a combination of classroom lectures, labs, and clinical site placements. Students successfully completing the curriculum will have fulfilled requirements to sit for the nationally administered board examination.

**Mission and Goals – Nuclear Medicine Technology**

It will be the goal of this program to produce competent, multi-skilled, imaging technologists. Graduates of this program will have obtained the level of didactic and clinical training necessary to meet eligibility requirements for national board examinations in their chosen modalities. While passage of these examinations are up to the individual and therefore cannot be guaranteed by the program, it is the program’s goal to supply each graduate with the necessary level of training and experience to adequately prepare for these examinations.

**History**

The Advanced Medical Imaging Technology (AMIT) Program was originally developed in 1964 as a Nuclear Medicine Technology Program and offered both an associate and baccalaureate degree. The baccalaureate degree in Nuclear Medicine Technology was the first in the nation of its type.

In 1996, the program became a baccalaureate only, multicredential, diagnostic medical imaging program. While several diagnostic imaging programs offer multicrodentialing as an option for its students, AMIT is the first program that has multicredentialing as its academic focus.

The first multicredential students began their professional curriculum in 1999. In 2003, AMIT began to offer a Certificate to provide an avenue for post-baccalaureate students who were unwilling or unable to pursue a second baccalaureate or an advanced degree.
Program Faculty & Staff Information

Alan Vespie, MEd, CNMT, RT(N)
AMIT Program Director
Nuclear Medicine Program Director

Alan is a product of the AMIT program earning his baccalaureate degree in 1982 from the University of Cincinnati after completing his studies in Nuclear Medicine Technology. He worked at Miami Valley Hospital in Dayton for 4 ½ years as a nuclear medicine technologist before coming back to the University of Cincinnati. Upon returning to the university, he served in the capacity of both a staff and research technologist. In 1992, he was appointed as the program’s educational coordinator and assumed full responsibility for the program’s operation in 1993. He was awarded his Master’s Degree in Education in 1997 from the University of Cincinnati, College of Education where he specialized in Curriculum and Instruction in Adult Higher Education. He received the department’s Distinguished Alumni award in 2016. In 2018 he was recognized by the College of Allied Health with the 20 in 20 Award, an award given to the twenty most influential contributors to the college’s progress in its first 20 years. Alan has worked for approximately 30 years in nuclear medicine and has been involved in the instruction of students for every moment of those 30 years as either a clinical preceptor or classroom instructor.

Barry Southers, MEd, RT(R)(MR)
Magnetic Resonance Imaging Program Director

Barry, a registered Radiologic Technologist and MRI Technologist by the ARRT, is a full-time Associate Professor, MRI faculty instructor and MRI Program Director for the AMIT program. Barry completed his radiography education at the University of Kentucky in Lexington, Kentucky in 1992, and received a Bachelor’s Degree in Radiation Science Technology from the University of Cincinnati in 2007. He completed his Master’s Degree in Medical Education at the University of Cincinnati in 2012, with a focus on Medical Curriculum and Instruction. Barry has been a Radiologic Technologist since 1992, and an MRI Technologist since 1996. Barry has several years of experience as a guest lecturer on the local, national and international level. He is the author of published articles on Magnetic Resonance Imaging in medical imaging magazines and journal publications, and the author of several abstracts and poster presentations. Barry was recognized by the College of Allied Health Sciences in 2015 for Excellence in Service.

Whitney Bowen, MEd, RT(MR), CNMT
Nuclear Medicine & MRI Clinical Coordinator

Whitney is a registered MRI and Nuclear Medicine Technologist. She is a 2010 graduate from the AMIT Program and 2017 graduate of the Master of Education program from Cincinnati Children’s Hospital and UC. Immediately following AMIT program graduation, Whitney began working for the AMIT program as an administrative assistant and clinical coordinator. In May 2016, Whitney accepted a position as a visiting
instructor in the AMIT program. Currently she teaches several of the program courses and is the clinical coordinator for MRI and Nuclear Medicine students. Whitney is also the president of a local professional imaging organization the Society to Advance Radiologic Technologists (START). Prior to her current position she worked as an MRI technologist at ProScan Imaging in Indianapolis and Mercy Health Anderson in Cincinnati and Nuclear Medicine technologist at Mercy Health Clermont.
Program Accreditation Information

Magnetic Resonance Imaging

Joint Review Committee on Education in Radiologic Technology (JRCERT)

The JRCERT monitors performance measures of programs and makes this information available to the public. Successful completion of a JRCERT-accredited program assures you that you will be provided with the knowledge, skills, and professional values required for career success.

The AMIT MRI program is currently accredited by the JRCERT, the next program review is scheduled for 2020.

http://www.jrcert.org/resources/program-effectiveness-data/

For additional JRCERT program requirements, JRCERT standards, and contact information please visit the following webpage:

http://www.jrcert.org/programs-faculty/

JRCERT Contact Information

20 N. Wacker Drive, Suite 2850
Chicago, IL 60606-3182
Phone: (312) 704-5300
Fax: (312) 704-5304
Email: mail@jrcert.org

Nuclear Medicine Technology

Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT)

The JRCNMT evaluates programs using nationally-recognized standards, ensuring quality educational programs.

The AMIT Nuclear Medicine program is currently accredited by the JRCNMT, the next program review is scheduled for 2019.

http://www.jrcnmt.org/

For additional JRCNMT program requirements & JRCNMT standards please visit the following webpage:
http://www.jrcnmt.org/program-resources/standards-manuals/

JRCNMT Contact Information

820 W. Danforth Rd., #B1
Edmond, OK 73003
Phone: 405-285-0546
Fax: 405-285-0579
Email: mail@jrcnmt.org
PREAMBLE

University of Cincinnati Mission Statement
The University of Cincinnati is a public comprehensive system of learning and research. The excellent faculty have distinguished themselves world-wide for their creative pedagogy and research especially in problem solving and the application of their discoveries.

The University system is designed to serve a diverse student body with the broad range of interests and goals. It is a place of opportunity. In support of this mission, the University of Cincinnati strives to provide the highest quality-learning environment, world-renowned scholarship, innovation and community service, and to serve as a place where freedom of intellectual interchange flourishes.

All members of the University community shall take responsibility for conducting themselves in ways that continue the pursuit of the University’s mission.

The Student Code of Conduct shall emphasize specific student responsibilities:
1. To recognize that the intellectual and educational climate of the University shall be maintained as the University’s highest priority.
2. To protect the opportunity for each student to attain their educational objectives.
3. To protect the physical and mental health, safety and welfare of each member of the University community.
4. To protect the property rights of all.
5. To promote the human rights of all members of the University community.

The Student Code of Conduct applies to all Advanced Medical Imaging Technology Students which includes Certificate, Baccalaureate, or Graduate level students whether enrolled as a full-time or part-time student.

The Student Code of Conduct may be found in its entirety at

http://www.uc.edu/conduct/Code_of_Conduct.html

Students are expected to abide by the professional codes of conduct and ethics associated with their current modality.

American Registry of Radiologic Technologists
American Society of Radiologic Technologists
International Society of Magnetic Resonance in Medicine
Society of Nuclear Medicine and Molecular Imaging
Society of Computed Tomography and Magnetic Resonance
AMIT Program Academic Integrity Policy

To: MRI and NMT Students
From: Alan Vespie, MEd, CNMT, RT(N)
Associate Professor and Program Director

Unfortunately, due to recent circumstances that have come to my attention in both the MRI and NMT courses, I find myself needing to pass along this letter from an academic colleague. Additionally, I will be stating the program’s position upon the subject and you will need to sign off indicating you understand the program’s position on academic integrity. But first, the letter from my colleague:

You know the message on cheating: Don’t do it. Yet despite knowing that it’s wrong, many students still cheat. Why? In response to a survey about cheating a student compared it to speeding. Everybody knows you shouldn’t speed, but most of us do. And when the weather is good and the road is clear, the risk of an accident is small. There is the matter of getting caught, but that risk is also low, so, the student reasoned, cheating is like speeding.

No, it’s not! Here are seven reasons why you shouldn’t cheat, and getting caught isn’t one of them.

1. When you cheat on an exam, it looks like you know the content, which means whenever you’re confronted with that material, you’ve got to fake it. Moreover, it looks to me like you understand, so I move on, assuming you know what you got right on the exam. What you didn’t learn in one course can be required knowledge in the next course. Knowledge in most fields is cumulative. It builds on previous knowledge. If you don’t understand the prerequisite content, you can’t learn the new stuff—so later you’ll either need to do double-duty learning or what you don’t know widens from a gap to gulf.

2. When you cheat, important skillsets, those things employers assume college graduates possess, remain undeveloped or underdeveloped. You learn problem-solving skills by solving problems, not by copying answers. Your writing improves when you write, not when you recycle someone else’s paper. Your abilities to think critically, analyze arguments, and speak persuasively all develop when you do them, not when you parrot the thinking, arguments, and persuasive ploys of others. Just as standing around exercise equipment does not build muscle mass, borrowing the work of others does not build mental muscle.

3. Don’t kid yourself, a small cheating problem seldom stays that size. Think more along the lines of a malignant tumor that starts tiny and quietly grows into something big and ugly. You may start by peeking for answers in a required course that you don’t want to take. In that first course in the major, you decide to copy homework answers—you’re busy and all that content will be covered again in later courses anyway. You cheat in the special topics course because you won’t use the content in the area where you plan to work. You end up fudging data in your senior research project because it isn’t a “real” study anyway. The research is clear. Students who cheat don’t do it just one time or in just one course.
4. Cheating in college sets you up for cheating in life. Maybe you’re telling yourself you’ll stop when you graduate. The research says otherwise. Those who cheated in college are more likely to cheat their employers or employees, fudge on their taxes, and use unethical business practices. It becomes a lifetime habit right along with the lying that covers it up.

5. Cheating puts your personal integrity at risk. What kind of person do you want to be? The actions taken now are defining who you are and will likely become. How does it make you feel when someone you care about lies or cheats on you? Do you hold those who cheat in high esteem? Your personal integrity is something you wear every day of your life. You can wear it with pride or you can slink around trying to hide the holes and cover the rips.

6. You can accomplish what you need to without cheating. Some students cheat because it’s easier than working for the grades—the reasons outlined above illustrate why that’s a cavalier, short-sighted rationale with serious consequences. Then there are the students who cheat because they don’t think they have the smarts to get the good grades they need. Success in college is much more a function of your study habits than your brain size. Good study habits are so not rocket science. And don’t say they don’t make a difference unless you’ve tried them. Start with one course and see if short, regular study times alone and with a buddy, regular class attendance, and keeping up with the homework make a difference. Bottom line: most students are way smarter than they think they are.

7. Cheating prevents you from being the person you want to be. Grades that you’ve earned provide a sense of accomplishment. They’re a source of pride. They say you’re a person to be reckoned with. Grades you haven’t earned also make you a person to be reckoned with but not for the reasons you’d wish.

In the first point, the author states “When you cheat on an exam, it looks like you know the content”. This is very true. However, board exams ferret that out. If you have been cheating to get the grades in these courses, you are not going to pass the board exam. Pretenders don’t make the cut.

When it comes to cheating, often the instructors are the last ones to find out. Sometimes they don’t find out at all. However, do you know who is in the loop of people who know? Employers! We have had program graduates who could not find a job because clinical sites knew they were cheaters and they don’t keep that information to themselves. It is widely dispersed within the imaging community.

As program director, my stance on cheating is simple. If you get caught, you will be immediately dismissed from the program. I don’t care if you are in your last week before graduation, you won’t graduate. All the time and money you have invested in your education will have been wasted. I have done it before and I will do it again if the circumstances arise.
Important Facts Parents NEED to Know about Record Privacy & Record Release at UC

1) UC’s record release policies are governed by federal government regulations collectively known as the “Family Educational Rights and Privacy Act of 1974, as Amended” (FERPA), and by State of Ohio law. The University of Cincinnati CANNOT waive FERPA or State regulations for ANY reason.

2) Under FERPA, Record Privacy rights transfer from the parents to the student once the student reaches 18 years of age or once he/she enrolls in an institution of higher learning. In either scenario, FERPA then regards the parents as “3rd parties.” Record release to all 3rd parties requires the student’s prior written and signed consent.

3) Parents may obtain student end-of-term grades and GPA information, only if:
   a) they can provide the Registrar’s Office with a copy of their most recently submitted federal tax return documents establishing the student as their financial dependent (family income amounts may be obscured); or
   b) the student provides the Registrar’s Office with his or her written, signed and dated consent (the student can rescind this authorization in writing at any time). Students should contact the Registrar’s Office for details.

4) Parents may obtain student bill and health insurance information, only if:
   a) the student has established an online One Stop Student Services Parent PIN authorizing the access. Note: if/when required, the Parent PIN must be reset directly by the student.

5) Record release to parents (and to all 3rd parties) occurs at the University’s discretion, even if the parents provide the qualifying tax return or the student’s written consent. The University reserves the right to deny requests for any and all student information to all 3rd parties, including parents.

6) The student’s written consent or the parents’ tax return may allow record release only. These documents do not constitute a “Power of Attorney” and so do not authorize the parents to take action in the student’s name or on his/her behalf.

7) All 3rd party requests to UC for student records must be submitted in writing directly to the Registrar’s Office. In all cases, 3rd parties (including parents) attempting contact with administrative offices, college offices, or the faculty will be referred to the Registrar’s Office. The Registrar’s Office will assess both the parents’ written request and the submitted authorizing documents and will provide a response. The Registrar’s Office will contact other administrative and/or college offices for information as required. Parents should not expect a same-day response from the Registrar’s Office to their information requests.

8) UC does not provide regular or automatic per-semester information releases (e.g., final grades) to any 3rd party (including parents). Parents authorized for release by either the student’s written consent or by their own tax return must submit a written request to the Registrar’s Office on each occasion.

9) FERPA permits UC to release the student’s “Directory Information” to anyone upon request without the student’s prior consent or notification. “Directory Information” at UC is: name; student identifier (non-Social Security Number), current mailing address, current telephone number, e-mail address (BOL), college, class, major, dates of attendance, enrollment status (full/ part-time), degrees/honors/awards received (including dates received).

10) Students may request that UC not release his or her “Directory Information” by submitting a form to the Registrar’s Office. Students should contact the Registrar’s Office for details.

Person Identification/Record Release Authorization Form

Student’s Name: ___________________ (Please print)
M Number: ___________________

As required by the Family Educational Rights and Privacy Act of 1974, as Amended (FERPA), by my signature below I hereby authorize University of Cincinnati to furnish the following information to one or more of the following clinical education settings as listed below upon request. This information is necessary to meet healthcare institution requirements for patient safety and accreditation. Students may also be required to undergo drug testing in order to participate in clinical experience at some clinical education settings. School will disclose information from a student's educational record, as appropriate, to personnel at Facility who have a legitimate need to know in accordance with the Family Educational Rights and Privacy Act. Facility agrees that its personnel will use such information only in furtherance of the Program, and that the information shall only be disclosed to third parties in accordance with the Family Educational Rights and Privacy Act.

Clinical Education Settings:

- Bethesda Arrow Springs – 100 Arrow Springs Boulevard, Lebanon, OH 45036
- Bethesda North Hospital- 10500 Montgomery Road, Cincinnati, OH 45242
- The Christ Hospital- 2139 Auburn Avenue, Cincinnati, OH 45219
- Cincinnati Children’s Hospital Medical Center - 3333 Burnet Avenue, Cincinnati, OH 45229
- Cincinnati Children’s Imaging Research Center - 3333 Burnet Avenue, Cincinnati, OH 45229
- Dearborn County Hospital - 600 Wilson Creek Road, Lawrenceburg, IN 47025
- Fort Hamilton Hospital- 630 Eaton Avenue, Hamilton, OH 45013
- Good Samaritan Hospital- 375 Dixmyth Avenue, Cincinnati, OH 45220
- Good Samaritan Medical Center at Western Ridge- 6949 Good Samaritan Drive, Cincinnati, OH 45247
- Jewish Hospital- 4777 East Galbraith Road, Cincinnati, OH 45236
- Mercy Health Anderson - 7500 State Road, Cincinnati, OH 45255
- Mercy Health Clermont- 3000 Hospital Road, Batavia, OH 45103
- Mercy Health Fairfield- 3000 Mack Road, OH 45014
- Proscan Eastgate- 4440 Glen Este-Withamsville Road, Cincinnati, OH 45245
- Proscan Mason - 4900 Parkway Drive, Cincinnati, OH 45040
- Proscan Midtown- 5400 Kennedy Avenue, Cincinnati, OH 45213
- Proscan Paul Brown Stadium- 6 Paul Brown Stadium, Cincinnati, OH 45202
- Proscan Tri County- 12124 Sheraton Lane, Cincinnati, OH 45246
- Proscan Tylersville- 7307 Tylers Corner Drive, West Chester, OH 45069
- Proscan Troy- 45 South Stanfield Road, Troy, OH 45373
- Proscan Westside - 6125 Harrison Avenue, Suite A, Cincinnati, OH 45247
- St Elizabeth Edgewood- 1 Medical Village Drive, Edgewood, KY 41017
- St Elizabeth Florence- 4900 Houston Road, Florence, KY 41042
- St Elizabeth Ft Thomas- 85 North Grand Avenue, Ft Thomas, KY 41075
- TriHealth Beechmont Anderson - 7777 Beechmont Avenue, Cincinnati, OH 45255
- University of Cincinnati Radiation Safety - 170 Panzeca Way, Cincinnati, OH 45267
- University of Cincinnati Medical Center - 234 Goodman Street, Cincinnati, OH 45219
- UC Health West Chester – 7700 University Drive, West Chester, OH 45069
- UC Health Varsity Village Imaging Center – 2650 Varsity Village, Cincinnati, OH 45267
- V.A. Medical Center - 3200 Vine Avenue, Cincinnati, OH 45220

Possible Information Provided:
- My Name
- My Social Security Number
- My Gender
- My Date of Birth
- My Immunization Record
- MRI Screening Form/Information
- Background Check: Federal and State

Student’s Signature: ____________________________ Date: __________
ADA Compliance

Students with Disabilities/Accessibility Resources Office

Vision

The Accessibility Resources Office at the University of Cincinnati will serve as the premier program for students with disabilities by fostering an environment that places independence, inclusion, and success at its core.

Mission

The Accessibility Resources Office is dedicated to empowering students with disabilities through the delivery of reasonable accommodations and support services by bridging post-secondary education with future real-world experiences.

Students with disabilities who need academic accommodations or other specialized services while attending UC will receive reasonable accommodations to meet their individual needs as well as advocacy assistance on disability-related issues. We are strongly committed to maintaining an environment that guarantees students with disabilities full access to educational programs, activities, and facilities.

In addition to academic accommodations in the classroom, students, faculty, or staff are encouraged to use the Adaptive Technology lab in 408 Langsam, next to the STRC editing suites.

To ensure timely implementation of academic accommodations:

- Make your request as soon as your disability is confirmed.
- Make your request at least eight (8) weeks before the semester begins.
- Please request interpreters or real-time captioning at least two (2) weeks prior to a program or event.

Accessibility Resources Office Location & Hours

210 University Pavilion

Phone: 513-556-6823
TTY: 513-556-3277
Fax: 513-556-1383
Relay: 711

Hours: Monday-Friday 8 am - 5 pm
E-mail: disabissv@ucmail.uc.edu
NOTES REGARDING THE AMIT CURRICULUM

Admission into the Professional Education component of the Advanced Medical Imaging Technology Program is a competitive process and not everyone meeting the minimum criteria for acceptance will be admitted. Although the limiting factor is usually the availability of clinical sites, program faculty are under no obligation to accept a student into the professional curriculum simply because availabilities exist. The number of clinical sites available from one year to the next is variable. Program officials will not know the number of available sites until summer semester.

Currently, the following four criteria are considered by program officials when selecting applicants. The program is continuously reviewed and updated. As such, the program reserves the right to alter the selection criteria without warning in response to changing conditions.

1. Quality of application
   a. Preparation
      i. Civic engagement
      ii. Observation/shadowing/first-hand knowledge of the disciplines
   b. Evidence of good character
   c. Written communication
      i. Strict adherence to formal grammar, spelling, and punctuation is expected.

2. Overall GPA
   a. Breadth and comprehension of academic background
      i. Transcripts for ALL previous collegiate work is submitted with the application.

3. Math and Science GPA
   a. Comprehension of coursework directly related to professional studies
      i. All math and science courses taken to meet program requirements are considered.
      ii. Math and science work completed in more advanced classes are considered if they are being used to meet program requirements.

4. Group Project
   a. Interpersonal interactions
      i. Generally about 6 – 10 applicants per group

*Minimum overall GPA of 2.8 is required at time of application and must remain above a 2.8 through the summer semester prior to being admitted to the professional curriculum.

Applications deadlines are established each year by the program but will most likely occur during the first week of January. The first three stages of the application process are usually completed in January and February. Only those students meeting the minimum criteria stated in the application will be invited to the final stage. The final stage will be completed in March with students being notified of the decisions in April. Unanticipated circumstances may extend these dates and applicants will be notified when/if delays should occur. Communication between applicants and program officials will occur primarily via email so applicants are urged to include an email address that they check regularly on their application.
Advanced Medical Imaging Technology
Certificate Programs

The College of Allied Health Sciences offers professional certificates in Magnetic Resonance Imaging and Nuclear Medicine Technology. The ideal certificate student will be one who has already earned a Bachelor degree or higher from an accredited institution and wishes to acquire additional skills and knowledge.

In addition to the Bachelor Degree, additional prerequisites include one course of pathophysiology, one year of college chemistry, one year of college physics, one year of college mathematics of algebra and higher, and one year of anatomy and physiology. If these courses were not taken as part of the Bachelor degree, they must be obtained before entering the certificate program. The University of Cincinnati will only accept academic credits completed during the past ten years.

Alternate eligibility is offered to health care professionals. These individuals must hold at least an Associate Degree in a health care profession from an accredited institution and have at least a one-year equivalent of full-time experience in the health care field within their specialty. One course of pathophysiology, one year of college chemistry, one year of college physics, one year of college mathematics (algebra and higher) and a year of anatomy and physiology are required. If these courses were not taken as part of the degree, they must be obtained before entering the certificate program. These requirements are under constant review and may be changed without notice.

The program is 12 consecutive months in duration. Through a combination of classroom and clinical instruction, students will be taught the specific skills needed for entry-level positions in their chosen modality.

Curriculum
The Certificate in Advanced Medical Imaging Technology involves 12 consecutive months beginning in the fall semester.

Pre-certificate courses listed here must be completed before entering the certificate curriculum. They may be completed as part of a degree program or separately in addition to a degree program.

Pre-Professional Course Work:

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Semester Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics: College Algebra and Trigonometry or higher</td>
<td>6</td>
</tr>
<tr>
<td>College Physics</td>
<td>10</td>
</tr>
<tr>
<td>Chemistry</td>
<td>8</td>
</tr>
<tr>
<td>Anatomy &amp; Physiology</td>
<td>8</td>
</tr>
</tbody>
</table>

Certificate Curriculum
Human Sectional Anatomy
AMIT Orientation and Patient Care Techniques
12-month curriculum in Magnetic Resonance Imaging or Nuclear Medicine Technology
What you need to know about the certificate program
Students who successfully complete the Certificate Program will receive the training necessary to accept an entry-level position in their chosen specialty and will be board eligible. However, there are some differences between the Certificate program and the Bachelor degree program.

Length of Study
The Certificate program is 12 consecutive months in duration (three academic semesters). The Bachelor degree is 24 consecutive months in duration. Certificate students receive training in one imaging modality while Bachelor degree students receive training in two imaging modalities. Certificate students may transfer up to 1 year of certificate credits toward a Bachelor degree in AMIT provided they complete a second year in AMIT as a matriculated Bachelor degree student.

Transcripts and Enrollment
International student must have their transcripts evaluated for American equivalency through organizations such as WES or ICD.

Domestic students must have their transcripts evaluated by the Advanced Medical Imaging Technology Program and/or the University of Cincinnati.

Tuition/Financial Aid
Currently the AMIT Certificate programs are not eligible for federal financial aid. It is the responsibility of the individual student to secure tuition money on their own.
ACADEMIC COURSEWORK

Nuclear medicine technology curriculum:

AMIT4020 Anatomy, Physiology, and Pathology of Nuclear Medicine Technology I
This is the first in a sequence of three courses discussing the anatomy, physiology, and pathology encountered and imaged in nuclear medicine. This course will provide an overview of radiation physics, instrumentation, radiation safety, radiopharmacy and radiation chemistry, as well as an introduction to nuclear medicine procedures. Musculoskeletal imaging will be the first of several body systems detailed in this series.

AMIT4021 Anatomy, Physiology, and Pathology of Nuclear Medicine Technology II
This is the second in a sequence of three courses discussing the anatomy, physiology, and pathology encountered and imaged in nuclear medicine. This course will discuss imaging of the respiratory, gastrointestinal, and genitourinary systems. Differentiating between normal and abnormal images and selection of imaging techniques based upon clinical questions are areas of emphasis.

AMIT4022 Anatomy, Physiology, and Pathology of Nuclear Medicine Technology III
This is the third in a sequence of three courses discussing the anatomy, physiology, and pathology encountered and imaged in nuclear medicine. This course will discuss imaging of the endocrine and cerebrovascular systems and will include inflammation imaging, breast imaging, and therapeutic procedures. Differentiating between normal and abnormal images and selection of imaging techniques based upon clinical questions are areas of emphasis.

AMIT4025 Radiobiology, Radiation Safety, and Radiopharmacy
This course will provide students with a detailed discussion of the safe handling of radioactive materials, units of radiation, units of exposure and dose, ALARA guidelines, and radiation protection instrumentation. This knowledge will be applied to the preparation, transport, and administration protocols for radiopharmaceuticals in nuclear medicine imaging.

AMIT4027 Nuclear Cardiology
This course will provide a detailed curriculum in nuclear medicine cardiology. Students will learn the gross anatomy and physiology of the cardiovascular system and the factors that lead to various cardiac changes. This course will emphasize the imaging protocols, radiopharmaceuticals, and pharmacological stress agents needed to obtain high quality cardiac images. Students will learn to differentiate between normal and abnormal images and to identify imaging artifacts.

AMIT4028 PET/CT and Fusion Imaging
This course will discuss the roles of the PET/CT scanner in diagnostic medical imaging. Course material will begin with PET/CT instrumentation and will evolve into quality control and calibration procedures. Diagnostic PET/CT imaging will be introduced and an emphasis will be placed on differentiating between normal and abnormal images and being able to identify imaging artifacts.
AMIT4030 Nuclear Medicine Physics and Instrumentation I
This is the first in a sequence of two courses that will discuss the fundamental principles of physics, mathematics, and instrumentation as applied to nuclear medicine. Topics include principles of radiation detection, radiation measuring instruments, atomic and nuclear structure, radioactive decay, interaction of radiation with matter, and the detection and registering of radiation events.

AMIT4031 Nuclear Medicine Physics and Instrumentation II
This is the second in a sequence of two courses that will discuss the fundamental principles of physics, mathematics, and instrumentation as applied to nuclear medicine. Topics include principles of radiation detection, radiation measuring instruments, atomic and nuclear structure, radioactive decay, interaction of radiation with matter, and the detection and registering of radiation events.

AMIT4033 Nuclear Medicine Technology Directed Practice I
This is the first in a sequence of three courses that will stress practical laboratory experience at clinical sites. Nuclear medicine students will perform procedures under the direct supervision of clinical preceptors. Students will be responsible for completing required clinical hours and nuclear medicine competencies on a variety of scanners as they train in local hospitals and imaging centers.

AMIT4034 Nuclear Medicine Technology Directed Practice II
This is the second in a sequence of three courses that will stress practical laboratory experience at clinical sites. Nuclear medicine students will perform procedures under the direct supervision of clinical preceptors. Students will be responsible for completing required clinical hours and nuclear medicine competencies on a variety of scanners as they train in local hospitals and imaging centers.

AMIT4035 Nuclear Medicine Technology Directed Practice III
This is the third in a sequence of three courses that will stress practical laboratory experience at clinical sites. Nuclear medicine students will perform procedures under the direct supervision of clinical preceptors. Students will be responsible for completing required clinical hours and nuclear medicine competencies on a variety of scanners as they train in local hospitals and imaging centers.

Magnetic resonance imaging technology curriculum:

AMIT4004 Diagnostic Magnetic Resonance Imaging I
This is the first in a sequence of three courses discussing the diagnostic uses of Magnetic Resonance Imaging. This course will emphasize the human central nervous system (brain and spine) anatomy as seen in multiple orthogonal planes. Distinctions between normal and abnormal with respect to anatomy and physiology will be determined.
AMIT4005 Diagnostic Magnetic Resonance Imaging II  
This is the second in a sequence of three courses discussing the diagnostic uses of Magnetic Resonance Imaging. This course will emphasize the human musculoskeletal system (upper and lower extremities) and the soft tissue of the neck as seen in multiple orthogonal planes. Distinctions between normal and abnormal with respect to anatomy and physiology will be determined.

AMIT4006 Diagnostic Magnetic Resonance Imaging III  
This is the third in a sequence of three courses discussing the diagnostic uses of Magnetic Resonance Imaging. This course will emphasize the human thorax, heart, abdomen and pelvic anatomy as seen in multiple orthogonal planes. Distinctions between normal and abnormal with respect to anatomy and physiology will be determined.

AMIT4007 MRI Physics and Instrumentation I  
This course is the first in a sequence of three courses on Magnetic Resonance Imaging Physics and Instrumentation. This course will study the physical principles, instrumentation and concepts of MRI, including the study of MRI safety, patient screening and patient care issues associated with the function of the scanner.

AMIT4008 MRI Physics and Instrumentation II  
This course is the second in a sequence of three courses on Magnetic Resonance Imaging Physics and Instrumentation. This course will study T1 recovery and T2 decay, T1, T2 and proton density, image contrast, basic concepts of pulse sequences, encoding, k-space, data collection, Fourier Transform, signal-to-noise, contrast-to-noise, spatial resolution, and spin echo formation and pulse sequences.

AMIT4009 MRI Physics and Instrumentation III  
This course is the third in a sequence of three courses on Magnetic Resonance Imaging Physics and Instrumentation. This course will study gradients, gradient echo formation and pulse sequences, flow phenomena, time-of-flight, gradient moment nulling, image artifacts, MRA, diffusion, perfusion, functional MRI, MR Spectroscopy, and the mechanism, safety, and application of MR contrast agents and relaxivity.

AMIT4011 Magnetic Resonance Imaging Directed Practice I  
This is the first in a sequence of three courses that will stress practical laboratory experience at clinical sites. MRI students will perform MRI examinations under the direct supervision of clinical preceptors. Students will be responsible for completing required clinical hours and MRI competencies on a variety of scanners as they train in local hospitals and imaging centers.

AMIT4012 Magnetic Resonance Imaging Directed Practice II  
This is the second in a sequence of three courses that will stress practical laboratory experience at clinical sites. MRI students will perform MRI examinations under the direct supervision of clinical preceptors. Students will be responsible for completing required clinical hours and MRI competencies on a variety of scanners as they train in local hospitals and imaging centers.
AMIT4013 Magnetic Resonance Imaging Directed Practice III
This is the third in a sequence of three courses that will stress practical laboratory experience at clinical sites. MRI students will perform MRI examinations under the direct supervision of clinical preceptors. Students will be responsible for completing required clinical hours and MRI competencies on a variety of scanners as they train in local hospitals and imaging centers.

1st Year Students (Bachelor’s degree & certificate students)

AMIT3015 Human Sectional Anatomy
This course is a survey of the human anatomy in all sectional planes. Medical images from CT, MRI, PET, and SPECT may be used to supplement the textbook. Students will be expected to use proper anatomical nomenclature with respect to body structures. This course will emphasize differentiating between normal and abnormal anatomical structures.

AMIT3020 AMIT Orientation and Patient Care Techniques
This is an introductory course for AMIT students who are entering the professional curriculum. Students will be introduced to workplace ethics, venipuncture, blood pressure monitoring, infection control, ECG monitoring, and proper body mechanics. This course is required for all students entering the AMIT professional curriculum.

2nd Year Students (Bachelor’s degree students only)

AMIT4090 Medical Imaging Research Methods
This is the first course in a sequence of three courses housing the senior capstone experience. During this first course, students are introduced to qualitative and quantitative research methods, basic statistical analysis and interpretation, and institutional research policies.

AMIT4091 AMIT Capstone
This is the second course in a sequence of three courses. This course is the primary AMIT Senior Capstone experience. Students will explore the intricacies of institutional review boards and encounter the style manuals of different publishers in the medical imaging community. Students will develop their literature review into a presentation that will be given at the College's annual PRaISE Conference.

AMIT4092 Medical Imaging Review
This is the third course in a sequence of three courses housing the senior capstone experience. This course will emphasize professional service to the medical imaging community. Students will prepare their literature review according to the style manuals of selected peer-reviewed journals. Students will be guided through professional service opportunities for new graduates. They will begin their professional service by writing a series of board examination questions suitable for their respective modalities. Students will be asked to prepare resumes and will be counseled on job search methods.
**Miscellaneous**

**AMIT5000 Advanced Medical Imaging Technology Practicum**
This course is an elective learning experience for students engaged with underserved communities. International service is preferred but domestic opportunities are a consideration for students unable to travel abroad. During their engagement, students will learn and reflect upon local customs, medical issues, economic issues, and government.

Courses are evaluated throughout the year and changes may take place in the curriculum. AMIT program faculty reserve the right to make the curricular changes they deem necessary.

** All clinical site rotation hours and scan competencies completed during university designated holidays and breaks are optional for students. Students may use this time to complete Directed Practice course requirements and will remained covered by the University of Cincinnati insurance policy as long as their attendance is directly linked to course requirements.
# AMIT Textbook List 2018-2019

## All 1\textsuperscript{st} Year AMIT & Certificate Students

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Textbook Information</th>
</tr>
</thead>
</table>

## All 2\textsuperscript{nd} Year AMIT (Not required for Certificate Students)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Textbook Information</th>
</tr>
</thead>
</table>

## MRI

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Textbook Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMIT 4004</td>
<td>Diagnostic MRI Imaging I</td>
<td>4</td>
<td><em>No textbook</em></td>
</tr>
</tbody>
</table>
## Nuclear Medicine

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMIT 4020</td>
<td>Nuclear Medicine AP&amp;P</td>
<td>I</td>
<td>4 credit hours</td>
</tr>
</tbody>
</table>

**Do not purchase the following textbooks until the Fall semester begins and you can get the member discount**

  - (New copy - Approximately $60 on SNMMI Website)

**Do not purchase the following textbooks until the Fall semester begins and you can get the member discount**

  - (New copy - Approximately $90 on SNMMI Website)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMIT 4025</td>
<td>Radiation Precautions</td>
<td>3</td>
<td>3 credit hours</td>
</tr>
<tr>
<td>AMIT 4027</td>
<td>Nuclear Cardiology</td>
<td>2</td>
<td>2 credit hours</td>
</tr>
<tr>
<td></td>
<td>Textbook information coming soon – SNMMI free textbook will be required</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMIT 4033</td>
<td>NMT Directed Practice I</td>
<td>3</td>
<td>3 credit hours</td>
</tr>
<tr>
<td></td>
<td>*No Textbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMIT 4030</td>
<td>Nuclear Medicine Physics (Spring &amp; Summer Semesters)</td>
<td>3</td>
<td>3 credit hours</td>
</tr>
<tr>
<td></td>
<td>*No Textbook</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Rules for Progression

1. Each student must abide by and complete the following in order to fulfill the requirements for successful completion of each professional component.
   a. Abide by the University of Cincinnati Student Code of Conduct
   b. Fulfill the Advanced Medical Imaging Technology Student time requirements
   c. Account for authorized leave by completing the Leave Authorization Sheet
   d. Attend the Clinical Rotation Schedules as assigned.
   e. Meet all educational and performance objectives.

2. Submit a "Clinical Evaluation Report" from one’s assigned clinical site every seven weeks or at the end of a clinical rotation.
   a. ALL evaluations, both good and bad, must be submitted. Withholding bad evaluations will be treated as a case of academic dishonesty and will be grounds for immediate dismissal from the program. Evaluations must be faxed to the AMIT office (558-4009).
   b. Students may not “fill out” a Clinical Evaluation Report on themselves or other students even if directed by Clinical Site officials. This will be treated as a case of academic dishonesty and will be grounds for immediate dismissal from the program.

3. Complete the Clinical Competency & Clinical Time Requirements.

4. Students may not advance to a second modality until courses within the first modality have been satisfactorily completed and the appropriate grade accepted by the Registrar’s Office.

5. Senior year students will not be cleared for graduation until courses within the current modality have been satisfactorily completed and the appropriate grade accepted by the Registrar’s Office.

6. Maintain at least a 3.0 cumulative quality point average for the entire degree program.
   a. Grades lower than a "C" in any professional curriculum course is not acceptable and will result in the immediate dismissal of the student from the professional component.

7. Students are responsible for conferring with Program Officials and Academic Advisors at least once a semester regarding the student’s progress.

8. Students are expected to demonstrate professional behavior at all times, especially in the classroom and at clinical sites. At a minimum, unprofessional coursework will need to be repeated with a lower grade and may result in program expulsion. Unprofessional activity at the clinical site will likely result in immediate dismissal from the program.

9. Students are responsible for assuring that their student records at the program, college, and university level are accurate and up-to-date.

10. These rules and regulations do not change the rules and regulations of the University of Cincinnati or the College of Allied Health Sciences. In cases of conflict, the rules of the University and College shall prevail.
**Clinical Competencies** – students will need to complete a number of procedures in each modality from beginning to end independently and without assistance of the Senior Technologist. There is a minimum number due each semester and this does vary by semester and imaging modality. You will be guided by the clinical coordinator with respect to your expectations.

1. Students will complete at least the minimum number of competencies each semester. This will include performing the procedure, providing a write up of the procedure, and having the supervising technologist fill out the appropriate paperwork.
   a. Be aware that completing only the minimum number of procedures each semester will leave the student needing additional competencies at the end of the year. Students should strive to complete significantly more procedures each semester than what is required.

2. If a student does not complete the minimum number of competencies at the end of each semester, the student will be given an “incomplete” grade for the Directed Practice course. The student’s grade will dropped 1 letter grade for late requirement completion if remedied BEFORE grades are due to the Registrar’s office. Grades will drop 2 letter grades if not remedied before grades are due to the Registrar’s office.

3. Student should retain a copy of all completed clinical competencies for their own records. These may assist in resolving discrepancies between work completed and credit earned.

4. Students may not advance to another modality or obtain their degree unless all didactic and clinical requirements are met, including completion of all clinical competencies required for board eligibility.

**Time Requirements** - Advanced Medical Imaging Technology Students are responsible for ALL of the following time requirements during each year of their professional curriculum (NO EXCEPTIONS):

1. Each student will maintain his/her own clinical time sheet. Time sheets are to be filled out each day during the year and will be collected weekly.

2. Each student must use only their time sheet. For most clinical rotations, students are expected to arrive no later than 8:00 am and are expected to stay until 4:30 pm. However, different clinical sites have different time expectations and students are expected to meet the time requirements of the individual sites.

3. Students cannot attend clinical rotations in excess of 10 hours per day or 40 hours per week.

4. In order to log in or out, you must have your time sheet signed by a Senior Technologist, Affiliate Laboratory Supervisor, or Program Official.
   a. This must be completed by the Senior Technologist or his or her designee. Students providing the required signature, even if directed by the Senior Technologist, will have the matter treated as academic dishonesty and may be dismissed from the program.

5. Sick days - in the event that you are sick for more than three (3) consecutive days, you must have a Doctor's note stating you may return to school and/or clinical rotations. Sick leave should be reported on the Leave Authorization
form and should be turned in to Program Officials.

6. All absences must be made up or accounted for before grades are submitted. Students are required to be aware of any missing time throughout the semester and are not to wait until time is officially tabulated at the end of the term.

7. Scheduled time off – Students are off during University designated holidays and breaks.

8. Should students need to schedule time off during the school year for known events (weddings, vacations, etc.) the student must have that amount of time already banked. Banked time is accumulated by working additional hours above and beyond the required hours or by attending professional imaging conferences. Conferences must be approved by the Program Director or Coordinator.

9. Students are permitted two personal days each year. Since all time off must be made up at time and a half, it is recommended that these personal days be used to accommodate essential commitments. Students not needing these days to facilitate such accommodations are welcome to use them as needed.

10. Students may not work in a job and simultaneously receive academic credit. Work and school are mutually exclusive events.

11. All time off outside of University designated holidays and breaks must be made up in a manner suitable to the Program Director/Coordinator of each individual modality. (Time and a half unless banked hours were acquired prior to the absence)

12. The minimum time requirement for students during each professional curriculum year is 12 consecutive months, and five days per week. There may be some minor variances between each imaging modality. Students will be expected to adhere to the requirements of their modality.

13. Time accumulated in excess of the required time has no bearing on required attendance as noted by the University of Cincinnati and may not be carried forward from semester to semester or from the Junior year to the Senior year.

14. If the time requirement has not been met by the end of a semester, the student will be given an “incomplete” grade for Directed Practice and the student is not eligible for progression to the next term. This may result in time needing to be made up during break, it may result in students waiting until the following academic year to advance, or it may result in the student being dismissed from the program.

15. If the time requirement has not been met by the end of an academic year, the student will be given an “incomplete” grade for Directed Practice III and the student is not eligible for board examinations, graduation, or advancement. If all other requirements have been met, the student will return to normal status once the time deficiency has been satisfied. Should this occur in the student’s first year, they will not be eligible to progress to the second modality until the time requirements have been satisfied. Should this occur during the final academic year, the degree and/or certificate is withheld until the time requirements have been satisfied.
**Time Requirement Deficiencies** - Deficiencies in time requirements may be made up as follows:

1. The student may have the option after the completion of their professional curriculum year of making up the necessary hours. This opportunity is not guaranteed and may depend on factors not yet determined including the willingness of clinical affiliates. Depending upon the length of the time deficiency, this may render the student ineligible for the next scheduled board examination and/or the next academic year of the professional curriculum, and/or graduation.

2. Clinical time missed must be made up at time and a half unless the student acquired banked time prior to the absence. (Example: If an 8-hour day is missed, the student must make up 12 hours.)

3. Students may make up lost hours during examination weeks or during University designated holidays and breaks. Please note that many sites do close on Holidays and you cannot be guaranteed these days as make up days.

4. Students may attend professional conferences at the local, state, national, or international level. Time will be awarded as 1 hour of conference attendance equaling 2 hours of deficient time. Conference attendance time accumulated in any one semester will not carry over to the following semester or from Junior to Senior year. Notes must be taken during each speaker and signed by a conference official to be credited for clinical time. Additionally, conference certificates will need to be submitted as attendance verification.

The above methods may only be used to make up for deficient time. It may not be used to satisfy time requirements prior to the end of the required 12 months. Due to accreditation requirements, students will not be permitted to use banked time as a substitute for class or clinical attendance at the end of a semester/year.

**Miscellaneous Requirements/Expectations**

1. Student identification badges are required to be worn visibly and face-up during clinical rotations for security reasons. Students are responsible for obtaining these identifications. Some clinical affiliates may require additional identification.

2. Nuclear Medicine dosimeters must be worn during all nuclear medicine rotation hours.

3. Clinical affiliates have the right to deny any student clinical time at their premises. No reason is required. Reasonable attempts will be made to place the student in another clinical site by program faculty.

4. Class attendance throughout the program is mandatory. Unexcused absences will result in a reduction of grade as outlined in the instructor’s syllabus.

5. All cell phones must be silenced before entering the classroom unless prior approval of the instructor is granted. Permission will be granted only under extenuating circumstances. Cell phones are not permitted during clinical rotation hours.

6. There will be no sleeping during class or clinical site rotations. Professional conduct is expected of our students at all times. If a student is found sleeping at
a clinical site, they will be immediately dismissed from that site that day and they will receive no credit for time worked. It is up to the clinical affiliate whether the student will be permitted to return. Should this occur, it will be up to the student to secure a satisfactory site that meets accreditation and program requirements. A second occurrence will be grounds for program dismissal.

7. Students will not be permitted to advance into a second modality unless all of the requirements of the first modality have been completed. All grades lower than a “C” are not considered as meeting the requirements of any of the imaging modalities. All grades of I, NG, W, or other similar designations indicating incomplete coursework must be resolved prior to advancement or graduation.

8. Baccalaureate or Certificate students not appearing on the official University Registrar’s class list may not attend class or clinicals and will not receive credit for work performed.

9. Students are responsible for attending to any details that may preclude their enrollment in a timely manner. If the University does not recognize the student’s enrollment, grades will not be issued regardless of attendance or performance.

10. Any student with a criminal conviction, misdemeanor or felony, should seek pre-approval from the board examination organization for their chosen modality/modalities at the beginning of the academic year (pg. 51).

11. Due to the pervasiveness of social media, students must be cognizant of their actions at all times and that slips in judgement may end up on social media. Under these circumstances, the student not only brings shame upon oneself, it may reflect poorly upon the program and the University. Depending upon the activity, students may be dismissed from the program if their apparent actions reflect poorly upon the University or program.

**Grounds for dismissal** - Due to the nature of clinical training, students will encounter situations in which their conduct may directly impact the quality of life of themselves as well as the quality of life for patients, supervising technologists and physicians, fellow students, and other university and affiliate personnel. As such, it is imperative that students conduct themselves in a professional manner at all times while on the premises of the university or a clinical affiliate. Specific behaviors will not be tolerated.

The following behaviors are grounds for immediate dismissal from the Advanced Medical Imaging Technology Program and may result in the loss of some or all of the monies spent for tuition, books, board examinations, and other education related expenses. The University, College and/or Program will not be liable for any expenses related to a student’s dismissal.

This list is a guideline for unacceptable behaviors and is not necessarily comprehensive.

1. Manufacturing, distribution, selling, using, offering for sale, possessing, buying or attempting to buy any illegal drugs or narcotics.

2. Attending class or clinical rotations while under the influence of alcohol, illegal drugs, or narcotics. Legally prescribed drugs are acceptable when used in the manner prescribed by a licensed physician and the effects of the drugs do not
impair the students’ judgment or physical activities.
3. Failure to comply with a university or affiliate official, security personnel, or law enforcement officer acting in the performance of their duty.
4. Intentionally harming, threatening to harm, or intimidating university or affiliate personnel or fellow classmates.
5. Intentionally harming, threatening to harm, or intimidating patients, their families or guests or fellow classmates.
6. Theft.
7. Failure to show up in a timely and consistent manner for clinical rotations. No more than three late arrivals per semester are acceptable.
8. Leaving a clinical rotation early without permission.
9. Failing to comply with the rules, policies, and/or regulations of clinical affiliates.
10. Fighting or quarreling with university or affiliate personnel, patients, or their families or guests.
11. Committing a crime (felony or misdemeanor) while on university or affiliate property. Committing a felony or misdemeanor at any location may result in the student permanently losing eligibility for board examination.
12. Failing to maintain at least a 3.0 grade point average in the program.
   a. Receiving any grade lower than a “C” in any professional curriculum course.
13. Either intentionally or unintentionally causing harm to occur to a patient, patient’s guests, or fellow health care worker either through action, negligence, or omission of action.
14. Falsifying or altering University, College, Program, and/or Affiliate documents (i.e., time sheets/cards, clinical competency forms, and evaluations).
15. Plagiarism.
11. Failure to comply with program and/or clinical site HIPAA policies.
DRESS CODE POLICY

It is important that patients and visitors to our hospital/laboratory look upon us as professional and competent in the performance of our duties. A strict dress code is an essential part of the impression we make. The professional image we should present is tailored, conservative in color and style, and without ornamentation. In keeping with this objective, the following dress code has been developed for our students. Should this policy conflict with the dress code set forth at clinical affiliates, the dress code of the clinical affiliate shall prevail. Interpretation of this policy is the responsibility of the appropriate supervisor. Failure to comply with the dress code will result in students being barred from taking part in clinical rotations.

Many of our clinical affiliates allow the use of “scrubs” and many of our students find these preferable to street clothes. Under some circumstances, individual institutions may have restrictions on certain types or colors of scrub attire. Program officials recommend that students check with their clinical affiliates prior to purchasing any scrub uniforms.

DURING CLINICAL ROTATIONS:
Safety, comfort, and ease of movement are necessary when dealing with both patients and equipment. The clothing worn by these personnel must reflect this additional consideration.

All items must be clean, pressed, in good repair. No sheer materials may be worn. All garments should be of an appropriate size to permit freedom of movement. The following is a generic guideline. More specific details may be found under each program’s section.

Identification:
Student identification badges are required to be worn visibly and face-up during clinical rotations for security reasons. Students are responsible for obtaining these identifications. Some clinical affiliates may require additional identification.

Clinical Uniform:
Nuclear Medicine and MRI: Scrubs-top and bottoms, conservative solid colors.
*Solid color undershirts are highly recommended.
Laboratory Coats:
Nuclear Medicine: White lab coat. Long sleeved, MUST come down to mid-thigh. Must always be worn buttoned on clinical sites. Lab coats are not to leave clinical sites (especially to lunch) except for the purpose of cleaning.

MRI: White lab coat. May be mid-thigh or shorter. Long or short sleeved is permitted.

Shoes:
Choose shoes that are comfortable. You will be on your feet a great deal. Higher quality shoes may be well worth the additional expense.

White nursing shoes or all white gym shoes with white laces. Should be worn only for clinical rotations.

Nuclear Medicine requires all shoes to have closed toe and heel. Crocs are not acceptable for any of the modalities.

Socks:
White

Hair/headwear
No unusual hair colors or styles.
Beards and mustaches must be well groomed and clean.
No head coverings of any kind, unless dictated by your religion and approved by the instructor.

Jewelry/ornamentation (see MRI requirements)
No visible tattoos.
Discreet body piercings only unless dictated by religion and approved by the instructor.

No more than 2 earrings in each ear.
No rings EXCEPT wedding rings.
No dangling necklaces/earrings/pendants.
No necklaces longer than 18 inches.
No bracelets.

Conservative facial makeup.
Fingernails - well manicured, medium length, clear or natural unchipped polish may be worn. No artificial fingernails.

Nuclear Medicine The application of facial and lip cosmetics is strictly forbidden in nuclear medicine laboratories.

MRI Metallic objects, including some surgical placements, are forbidden in MRI laboratories.
Miscellaneous
- No perfume or aftershave is to be worn.
- No sunglasses are permitted.
- Name badge should be worn face up at all times.
- Students are expected to maintain personal hygiene consistent with affiliate expectations.
- No gum chewing during class or clinical rotations is allowed at any time.
- No cell phones during clinical hours
- No jackets or sweatshirts will be permitted during clinical hours unless they are scrub jackets. Nuclear medicine students are required by federal regulations to wear appropriate lab coats during clinical rotations.

DURING CLASSROOM HOURS ONLY
No specific dress code beyond any established by the University has been established for students in the AMIT classroom. Students are urged to dress appropriately for the room temperature and in a manner that does not create a distraction. These may run either hot or cold and are often beyond the means of the faculty/staff to control. Program officials urge good taste in selection of wardrobe.
FIRE
All university buildings are equipped with automatic fire alarm systems. Many are equipped with voice systems that will give specific instructions, as well as automatic sprinkler systems. In the event that a fire alarm sounds, all persons are required, under state law, to evacuate the building immediately. Failure to evacuate is a criminal offense. Persons in charge of a facility (including faculty teaching class) are also responsible for evacuating their area, and may be held personally liable for a failure to evacuate. Once a fire alarm has sounded, do not re-enter a building until the all clear message has been given by emergency personnel.

Testing of the fire alarm system is normally conducted during hours the building is closed and is posted in advance. Any fire alarm that sounds must be treated as an actual alarm unless prior notice is given of the testing. When evacuating, take your personal belongings with you, and secure your office as you leave.

In the event of a fire or fire alarm, the student should take the following actions:
- Immediately exit the building via the nearest stairwell
- Exit the classroom or lab, verifying all visitors have left. Students shall not attempt to extinguish a fire
- Pull the fire alarm (located at each stairwell and main entrances)
- If possible, call 9-1-1 from a phone located a safe distance away from the building, to report the exact location of the fire
- Exit the building and await the fire department
- Do not reenter until you receive the all clear message from Public Safety

PHYSICAL DISABILITIES

Special Procedures are in place for persons with physical disabilities who may be present in a building during a fire. Persons with physical disabilities are permitted to stay in a building during an emergency situation only if they are non-ambulatory or where elevator assistance is essential for their evacuation and they are located either above or below the ground floor. Elevators cannot be used during a fire alarm. All other persons with disabilities need to evacuate the building in an emergency situation. If required, persons with a visual impairment should seek assistance from other occupants in the building. Many UC buildings are provided with designated Areas of Rescue Assistance for this situation. These areas are equipped for two-way voice communications with the 9-1-1 dispatcher, and are located within fire resistive areas of the building typically stairwells. The faculty members may want to check on the presence of these areas in order to assist a person with a physical disability in their class. For buildings where there are not designated Areas of Rescue Assistance, or if their presence is unknown, persons with disabilities should be instructed to seek a safe place (preferably a room with an exterior window, a telephone and a solid door), call 9-1-1 and report their location to the
dispatcher. The Fire Department will then determine if they need to provide evacuation assistance or if the caller should stay in place.

SEVERE WEATHER

The University has implemented a severe weather warning system as part of its ongoing fire and life safety systems upgrade. This system allows Public Safety to play prerecorded announcements in many of the campus buildings when severe weather threatens. This system will be used in conjunction with the existing Hamilton County siren warning system. The sirens effectively warn persons out of doors; however they do not provide good coverage indoors. The campus system delivers the warnings to persons inside the buildings, as well as providing more detailed instructions. The sirens and the campus system are activated for severe weather warnings only, not for watches.

Each building has a designated severe weather shelter area. These locations can be found at http://www.uc.edu/content/dam/uc/publicsafety/docs/SHELTER_LOCATIONS.pdf

A severe thunderstorm WATCH indicates that conditions are favorable for the formation of a thunderstorm of 58 mph or greater. Hail with a diameter of ¾” or more may also be present. A severe thunderstorm WARNING is issued when severe thunderstorms have developed in the area. Shelter should be sought indoors, away from windows.

A tornado WATCH indicates that weather conditions are such that tornadoes can develop, as well as implying that thunderstorm activity may be severe. A tornado WARNING indicates that a tornado has actually been sighted in the reporting area. Immediate shelter should be taken in the lowest interior area of a building. Avoid long span roof areas (auditoriums and gymnasiums) and areas with large amounts of glass.

The Hamilton County warning sirens use a steady tone to indicate a severe weather warning (a rise fall tone is used for an attack warning). Both tones are tested on the first Wednesday of each month at 12 noon; unless there is threat of severe weather. The campus weather warning system will be tested at the same time of the day also on the first Wednesday of every month.

Should a severe weather WARNING be issued, faculty members should instruct their students to move to the severe weather shelter area of the buildings. In some cases (classrooms on lower levels with no exterior windows) it may not be necessary for the class to move. Everyone should review their class locations against the list of shelter areas (see above link in this section). Call the Fire Prevention Unit at 556-4992 if you have questions.

SHELTER IN PLACE

Several potential emergency situations that release hazardous materials into the air may result in local government issuing a “Shelter In Place” warning. These situations include chemical spills, fires, and chemical/biological attacks. Shelter in place means taking refuge inside a building and isolation yourself as much as possible from the outside air.
When a shelter in place warning is issued that affects the University of Cincinnati, an announcement will be made over the campus warning system. In buildings which are not part of the campus warning system, the warning will be issued via weather alert radio. The following steps should be taken upon hearing the shelter in place warning:

- Close outside windows and doors
- Turn off individual window air conditioners or fan units that bring in outside air
- Remain indoors and await further instructions or the all clear message

Faculty will keep students in the classroom/lab until the emergency is over, or until other instructions are given.

For students living in a Resident Hall, the actions are basically the same. All Resident Halls are part of the campus warning system, and will receive voice announcements. Residents should take the following steps upon hearing the shelter in place warning:

- Close outside windows and doors
- Turn off individual window air conditioners or fan units that bring in outside air (Dabney, Turner, and Schneider)
- Remain indoors and await further instructions or the all clear message

MEDICAL EMERGENCY

Should any person suffer a medical emergency, assistance can be summoned by calling 9-1-1. University Hospital provides a paramedic service to the UC main campuses, with back-up coverage form the Cincinnati Fire Department. Be sure to specify exactly where in the building the patient is located and if possible send someone to meet the paramedics at the main entrance.

THEFT

In the event that a student is the victim of a theft (or other non-violent crime) contact the UC Police department at 556-1111.

WORKPLACE VIOLENCE & VIOLENT CRIME

Unfortunately, workplace violence and violent crimes do occur on university campuses, although rarely. UC has a training program available for interested departments. For information, contact the Crime Prevention Unit at 556-4900. Further information can be found at http://www.uc.edu/publicsafety/police/CrimePrevention.html

In the event that a violent event was to occur elsewhere in a building lock the classroom door and move out of the line of view of the door. Contact the police by calling 9-1-1 from a campus phone or 556-6111 from a cellular phone. Police personnel will provide further instructions on the building public address system.

Should a violent event occur in a classroom, if the suspect has fled, follow the same steps as above. If the suspect is still present, attempt to evacuate from the room. Call 9-1-1 as soon as possible. Be aware that 9-1-1 calls from campus phones are automatically identified, so if you cannot talk, police officers will be sent to investigate. At the present
time, there is no method of identifying where a cellular phone call is made, so you must be able to speak to summon assistance by cellular phone.

**BOMB THREATS & SUSPICIOUS PACKAGES**

If you should receive a bomb threat, a suspicious package, or locate a suspicious item, contact the Police Department immediately by calling 9-1-1 on a campus phone. **DO NOT USE A CELL PHONE!!** UC has training and information packages available regarding bomb threats and suspicious packages. For more information contact Crime Prevention at 556-4900 or [http://www.uc.edu/publicsafety.html](http://www.uc.edu/publicsafety.html)

If you receive a bomb threat write down exactly what is said as soon as possible. If you have a display phone, note the number that the call was received from.

If you receive a suspicious package or locate a suspicious item, do not move or open the item. Clear persons away from the immediate area and lock the area. Meet the responding police officers outside.

**ACTIVE SHOOTER**

*How to respond when there is an active shooter in your vicinity*

Quickly determine the most reasonable way to protect your own life. Remember that students and visitors are likely to follow the lead of faculty and staff during emergency situations.

1. **Evacuate**
   - Have an escape route and plan in mind, evacuate regardless whether others agree to follow or not
   - Leave your belongings behind
   - Follow the instructions of any police officers
2. **Hide Out**
   - Lock the door
   - Blockade the door with heavy furniture
   - Silence your cell phone
   - Remain quiet
3. **Take action against the active shooter**
   As a last resort, and only when your life is in imminent danger, attempt to disrupt and/or incapacitate the active shooter by:
   - Acting as aggressively as possible against him/her
   - Throwing items and improvising weapons
   - Yelling
   - Committing to your actions
How to respond when law enforcement arrives

Law enforcement’s purpose is to stop the active shooter as soon as possible. Officers will proceed directly to the area in which the last shots were heard.

· Officers may wear regular patrol uniforms or external bulletproof vests, and helmets
· Officers may be armed with rifles, shotguns, handguns
· Officers may use pepper spray or tear gas to control the situation.
· Officers may shout commands and may order individuals to the ground for their safety

How to react when law enforcement arrives:

· Remain calm and follow officer’s instructions
· Put down any items in your hands (i.e., bags, jackets)
· Keep hands visible at all times
· Avoid making quick movements toward officers such as holding on to them for safety
· Exit in the direction the officers are entering the premises

http://www.ucblueash.edu/resources/safety/run-hide-fight.html

PHONE NUMBERS & WEB SITES

Department of Public Safety
  Emergency Dial 9-1-1 or 556-1111
  Non-Emergency 556-4900
  Dispatcher 556-6111
  Crime Prevention 556-4900 (Workplace violence, theft, general info)
  Fire Prevention 556-4992 (Fire Safety, evacuations, severe weather)
  Emergency Planning 556-4900 (UC emergency plan, terrorism)
  www.uc.edu/pubsafety

Environmental Health & Safety 556-4968
  http://ehs2.uc.edu

Radiation Safety 558-4110
  www.uc.edu/radsafety
EMERGENCY PROCEDURES
INCIDENCES INVOLVING RADIOACTIVE MATERIAL

This is a summary of emergency procedures. For more detailed procedures see the Authorized User’s Manual. All incidents require completion of “Incident Report” RS FORM 7.

Radiation Safety Phone Numbers:
Work hours: 558-4110 or Emergency Digital Pager 249-8741
After hours: Digital Pager 249-6812 or contact security and request they contact Radiation Safety
UC-West 556-1111 or UC-East 558-1111
Children's 559-4204
Shriners 872-6230

Spills
1) If Possible, contain spill.
   Liquid Spill - Contain liquid by surrounding with absorbent material.
   Solid Spill - Cover with a well dampened absorbent paper.
2) Notify all persons in the area a spill has occurred.
3) Contact Radiation Safety.
4) Decontaminate.
5) Survey to ensure effectiveness of decontamination.
6) Complete incident report.

Personnel Contamination
1) Notify other personnel in the area of the incident and if necessary request help be contacted.
2) Treat contacted area:
   Eye - flush eye with water for 15 minutes;
   Skin - wash gently with mild soap and water;
   Inhalation - vacate area and regroup outside
   Clothing - remove, and wash skin under area with soap and water.
3) Contact Radiation Safety.
4) Complete incident report.

Personnel Injury (ASSIST PEOPLE FIRST)
1) Contact medical personnel. Inform them of incident and that radioactive material may be involved.
2) Contact Radiation Safety.
3) Complete incident report.

Fire (TREAT FIRE FIRST)
1) Vacate area or use fire extinguisher.
2) Sound fire alarm.
3) Contact fire department. Inform them of situation including that radioactive materials may be involved.
4) Contact Radiation Safety.
5) Complete incident report.

RS FORM 34 (6/92)
ADVANCED MEDICAL IMAGING TECHNOLOGY PROGRAM

NUCLEAR MEDICINE TECHNOLOGY PREGNANCY POLICY

Medically confirmed pregnant Nuclear Medicine Technology students shall inform the program director within 24 hours of confirmation. The student will then be counseled and review the U.S. Nuclear Regulatory Commission Appendix to Regulatory Guide 8.13, "Possible Health Risks to Children of Women Who Are Exposed to Radiation During Pregnancy".

The pregnant student electing to withdraw from the program may apply for readmission at the conclusion of the pregnancy. Acceptance is not guaranteed.

The pregnant student who elects to continue in the program must follow all college and program policies. Due to the competency-based nature of the Advanced Medical Imaging Technology Program, major alterations in clinical assignments and lab activities cannot be made up. As a result, the student electing to continue does so at her own risk in that neither the college nor the clinical affiliate can guarantee that the student would not exceed the maximum permissible dose of 0.5 rem during the entire gestation period.

After counseling, the student must sign and date the pregnancy form provided, documenting their decision on whether to withdraw or continue in the nuclear medicine technology program.

MAGNETIC RESONANCE IMAGING PREGNANCY POLICY

It is the policy of the Magnetic Resonance Imaging section of the Advanced Medical Imaging Technology program at the University of Cincinnati to provide reasonable radio frequency protection to student technologists occupationally exposed to radio frequency. Pregnant students are expected to follow the recommendations of the ACR and the MRI department regarding pregnant health care practitioners as outlined in the ACR White Paper on Magnetic Resonance (MR) Safety and MRI Safety Policy for Pregnant Patients, Staff and Visitors.

ACR Pregnancy-Related Issues:

Pregnant health care practitioners are permitted to work in and around the MR environment throughout all stages of their pregnancy. Acceptable activities include, but are not limited to, positioning patients, scanning, archiving, injecting contrast, and entering the MR scan room in response to an emergency. Although permitted to work in and around the MR environment, pregnant health care practitioners are requested not to remain within the MR scanner bore or Zone IV during actual data acquisition or scanning.

ACR Guidance Document on MR Safe Practices: 2013:

PREGNANCY FORM – Nuclear Medicine Technology

I the undersigned do hereby acknowledge that I have been counseled regarding the possible health risks to my unborn fetus and my option to either withdraw or continue in the program in full accordance with the Advanced Medical Imaging Technology Program written Pregnancy Policy.

Below, I have indicated the option I choose to select:

_______  1. I elect to withdraw from the Advanced Medical Imaging Technology Program in order to protect my unborn fetus from any unnecessary radiation exposure.

_____________________________     __________
   Signature                      Date

_______  2. I elect to continue in the Advanced Medical Imaging Program realizing that my radiation exposure may exceed the maximum permissible dose of 0.5 rem during the entire gestation period and do so at my own risk.

_____________________________     _____________
   Signature                      Date
Declaration of Pregnancy – Nuclear Medicine Technology

Date: __________________________

To: Radiation Safety Office (ML 0591)

From: _____________________________

1. This is to officially inform the University of Cincinnati Radiation Control and Safety Program that I am pregnant. I understand this declaration is optional under the University of Cincinnati’s Radiation Control and Safety Program and I understand I may "undeclare" my pregnancy, in writing, at any time. For assistance in determining if additional monitoring or special precautions are necessary, I am providing the following information.

I work with radioactive material/radiation generating equipment (RGE) under the supervision of: _____________________________

Radionuclides I will be using or have used during my pregnancy:

________________________________________________________________________

________________________________________________________________________

RGE I will be using or have used during my pregnancy:

________________________________________________________________________

________________________________________________________________________

I am currently exposed to, but am not using the following radionuclides or RGE:

________________________________________________________________________.

My estimated date of conception is: __________________

My delivery date is on or about: __________________

I currently [ ] receive personnel monitoring.

[ ] do not receive personnel monitoring.

For any questions please call me at: _____________________________

2. I understand that I may speak with a member of the Radiation Safety Office about my radiation exposure and the Radiation Safety Office recommends I make an appointment to speak to them as soon as possible.
PREGNANCY FORM – Magnetic Resonance Imaging

AMIT MRI Safety Policy:

Pregnant staff and health care providers may enter the scan room when the static field is on, but should not remain in the room during the scan.

Upon medical verification of her pregnant condition, written disclosure of the said condition to program officials is the student’s responsibility and is to be initiated voluntarily. Students have the right to refuse disclosure of medical information; however, in the event that a student chooses not to disclose information regarding pregnancy, the student is acknowledging that they are assuming all responsibility for their condition and any potential complications that may arise.

Upon medical verification that a pregnancy exists, students have the following four (4) options:

**Option #1 - Elect not to disclose information regarding pregnant condition**
- By choosing this option, the student implies acknowledgement that she has chosen to disregard the recommendations made by the ACR and the Program and that she is assuming responsibility for all potential risks and related complications.
- *No policy or performance exceptions will be allowed should the student choose this option.*

**Option #2 – Elect to withdraw from the Advanced Medical Imaging Technology program.**
- By choosing this option, the student will withdraw from the program effective immediately and will be immediately removed from their current clinical rotation.

**Option #3 - Elect to continue in the Advanced Medical Imaging Program realizing that there may be possible restrictions implemented by my clinical sites.**
- If the student so decides, she may continue in the Program under the following conditions:
  - The student shall not remain in the scan room during actual data acquisition or scanning.
  - The student shall participate in all scheduled clinical rotation areas as assigned.
  - Absences due to pregnancy are governed by the Attendance and Medical Leave of Absences policy.

**Option #4 – Elect to continue in the Advanced Medical Imaging Program without any program modifications assuming all responsibility to you and your fetus’ health.**
- By choosing this option, the student implies acknowledgement that she has chosen to disregard the recommendations made by the ACR and the Program and that she is assuming responsibility for all potential risks and related complications.
PREGNANCY FORM – Magnetic Resonance Imaging

Officially, I am declaring my pregnancy to a program faculty member. I the undersigned do hereby acknowledge that I have been counseled regarding the possible health risks to my unborn fetus and my option to either withdraw or continue in the program in full accordance with the Advanced Medical Imaging Technology Program written Magnetic Resonance Imaging Pregnancy Policy.

Below, I have indicated the option I choose to select:

_______ I elect to withdraw from the Advanced Medical Imaging Technology Program.

_____________________________     __________
Signature                      Date

_______ I elect to continue in the Advanced Medical Imaging Program realizing that there may be possible restrictions implemented by my clinical sites.

_____________________________     __________
Signature                      Date

_______ I elect to continue in the Advanced Medical Imaging Program without any program modifications assuming all responsibility to me and my fetus’ health.

_____________________________     __________
Signature                      Date

------------------------------------------------------------------------------------------------------------------------

_______ Effective immediately, I am officially withdrawing my declaration of pregnancy.

_____________________________     __________
Signature                      Date

As the Clinical Coordinator, I have reviewed the possible health risks with the student and have confirmed her program withdraw or continuation as signed above

_____________________________     __________
Signature                      Date
Miscellaneous AMIT Program Policies

INCLEMENT WEATHER AND OTHER EMERGENCIES:

*College of Allied Health Science Policy*

The University of Cincinnati is always officially open. During periods of severe inclement weather, public emergency or other crisis, the President or a designated cabinet officer may announce, through the UC emergency communication system, homepage, and the local news media, that some or all of the university's offices and facilities are closed for part or all of a workday.

As part of a comprehensive effort to inform its community of any emergencies that might arise on campus, the University of Cincinnati now offers an emergency text messaging service. Participation is voluntary. UC Public Safety will utilize the system at its discretion if there is an imminent threat to the safety and security of the campus community or to announce a weather related university closing.

The university encourages students, faculty, and staff to sign up. You will need to provide your cell phone number and your cell carrier. Please note that international cell phone numbers will not currently work with the text messaging system.

The university will test the system each term to determine if it is working properly, but you will not receive non-emergency or advertising messages. UC will not sell the information. Normal text messaging rates apply; check your wireless plan to determine relevant charges.

Currently enrolled UC students can sign up or update their information by clicking on the “My Information” tab on the OneStop website. (http://onestop.uc.edu)

Students and faculty are urged to exercise judgment in determining whether travel to class or a clinical site is hazardous. Students who choose not to attend class should notify their instructors as early as possible. Absences due to inclement weather will only be excused at the discretion of the instructor.

For clinical placements, the clinical area must be notified promptly by the appropriate person if students or faculty are going to be absent or late.

Faculty will notify students via email or Blackboard if they are unable to attend class or travel to clinical practice areas.

*AMIT Clinical Rotation Policy:*

AMIT clinical rotation hours will follow the UC severe inclement weather policy. Any official UC delays, closures, or early dismissals will be subtracted from your weekly clinical hour requirements.
Classroom Attendance Policy:
Classroom attendance and tardy policies are determined by each course instructor. Please see each course syllabus for additional information.

Electronics Policy:
All cell phones must be silenced before entering the classroom unless prior approval of the instructor is granted. Permission will be granted only under extenuating circumstances. Cell phones are not permitted during clinical rotation hours.

Each classroom instructor reserves the right to implement their own laptop/tablet policy within the classroom. Please see individual course syllabi for additional information.

No Tobacco Policy:
The use of tobacco products, including cigarettes, cigars, pipes, chewing tobacco and snuff, on the AHC campus will be strictly prohibited.

This includes inside and outside all university-owned and leased AHC facilities, sidewalks, parking lots and green space. This also includes smoking while in vehicles on the AHC campus and in university-owned vehicles on and off the AHC campus at all times.

The Academic Health Center is not the only health facility implementing this new initiative. Nearly 20 other local hospitals, including University Hospital and other Health Alliance of Greater Cincinnati hospitals, Cincinnati Children's Hospital Medical Center and Cincinnati Shriners Hospital for Children, have recently enacted tobacco-free policies.

The university is offering education, information and cessation support to those immediately affected by this new policy through the UC Wellness Center. Those interested in learning more about available nicotine programs should call (513) 584-4457 or visit www.uc.edu/uhs.

UC is also encouraging tobacco users interested in quitting to contact the state of Ohio's Tobacco Quit Line by calling (800) 943-4840 or visiting www.standohio.org.

http://healthnews.uc.edu/publications/findings/?/4328/4338/

http://www.uc.edu/hr/bewelluc/i_want_to/feelwell/tobaccofree.html

Classroom Venipuncture Policy:
All classroom venipuncture labs will be conducted in the form of simulation using mannequin arms. No venipuncture will be performed on instructor or peers within the classroom or AMIT lab.
Overall Purpose
These supporting guidelines are intended to properly portray, promote and protect the institution and its employees, faculty, staff and students. For official University entities, please refer to the Governmental Relations & University Communications Social Media Policy (see link at bottom of page 2 of this policy). This policy helps to provide guidelines for personal social media presence, i.e. personal Facebook, Instagram, Twitter, etc. accounts.

Policy
The University of Cincinnati’s College of Allied Health Sciences is committed to leveraging technology to educate our students to become skilled leaders. Our primary method of communication is the UConnect (UC) e-mail account. However, we support the use of social media outlets as a supplemental venue for elective unofficial communication and reminders.

While we strongly advocate for all members of the College of Allied Health community to utilize various social media outlets, it is imperative that all are cognizant of the content of posts. Social media is not the appropriate venue to share and address all matters. Individuals are responsible and will be held accountable for the content of their posts on any social media platform. College of Allied Health Sciences has developed this social media policy in an effort to appropriately represent, advance, and protect members of our community and the University of Cincinnati.

Social Media Definition
Social media is characterized as a platform of electronic communication (web sites for social networking and blogging) through which users create online communities to share information, ideas, personal messages, and other content (videos, pictures), etc.

Examples of social media outlets may include, but are not limited to:
1. Social Networking Sites (Facebook, LinkedIn, Pinterest, Snapchat, Instagram, Flickr)
2. Content Communities (YouTube)
3. Micro-blogging sites (Twitter)
4. Blogs (company and personal blogs, Wordpress, Blogger), Forums and Discussion Boards (Google Groups, Yahoo! Groups)

Provisions of the Social Media Policy
• Personal and professional growth and learning are a result of engaging in conversations and sharing opinions. It is imperative that you are aware of the content and behavior of your activity as you participate in social networking.

• Social media sites do not ensure privacy regardless of the privacy restrictions you have enabled on your accounts. Search engines can recover posts even if they were deleted. If you experience any hesitation when posting, do not post without consulting with an appropriate authority, such as your faculty instructor or in the case of faculty and staff, a supervisor.
• Do not post confidential information about yourself or others. You may not post photos from a health care site unless you have obtained a personal consent form from the individuals in the photo and a consent form from the organization in which the photo was taken.

• There is an expectation to be respectful, responsible, and accountable for behavior with any interaction and communication with others via social media. Unacceptable posts would include but are not limited to ethnic slurs, personal insults, or obscenity. You should also show proper consideration for others’ viewpoints on topics considered sensitive, such as politics and religion.

• Publish and post on social media platforms with caution. Content should be honest, accurate, and in good taste.

• You are legally liable for any social media activity. Posts to social media sites that are deemed to be defamatory, harassing, obscene, profane, unprofessional, or in violation of any law will not be tolerated and are subject to disciplinary action.

• The expectation is all social media use will to adhere to all applicable university privacy and confidentiality policies, including the Family Educational Rights and Privacy Act (FERPA) and the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

• As faculty, staff and students at the University of Cincinnati’s College of Allied Health Sciences, it is your responsibility to continually review the provisions of the social media Policy.

Consequences for Violation of Policy
• Violations of the Student Code of Conduct, AAUP contract, University policies and/or state or federal laws as it relates to social media will be responded to by the appropriate authority.

Related Link
Governmental Relations & University Communications - Social Media Policy
Acceptable Use of University Information Technology Resources
Consent to photograph, videotape, publish or televise Policy

I hereby agree to be photographed or videotaped and permit the University of Cincinnati to televise, distribute or publish these photographs or videotapes.

___ I grant permission for the use of my name and photographs or images of me.

___ I grant permission only for the use of photographs or images of me.

The above is for the following purposes: __Including by not limited to Facebook and CAHS website posts.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Regardless of whether my image or name is used for future distribution, I waive any claim to monetary rights that may result from these activities. I also release the University of Cincinnati, its employees, agents, successors and assigns from all liability related to the University’s use of my name and/or likeness.

I understand that I may revoke this consent at any time through a written request to:

University of Cincinnati
Advanced Medical Imaging Technology Program
3202 Eden Avenue
Cincinnati, OH 45267

_________________________________________________________________
(Signature) (Date)

_________________________________________________________________
(Parent or guardian) (Date)
Patient Authorization for Media Interview, Photograph and/or Videotape

I hereby authorize the disclosure of personal health information about me as a patient of:

________________________________ (name of hospital/outpatient center)

1. Describe fully the personal health information that is the subject of this authorization and which will be disclosed as written below (Ex: Name, Age, Illness, Symptoms, Condition, Treatment, etc.)

_______________________________________________________________________________

_______________________________________________________________________________

2. The University of Cincinnati’s Advanced Medical Imaging Technology Program may release my personal health information that is described above to the following media/educational outlets:

□ Advertising/Marketing □ Classroom Assignments/Conferences

□ UC Newsletter or Magazine □ UC or UC affiliated websites

□ Television □ Radio

_______________________________________________________________________________

3. The purpose of the authorized disclosure of the information described above is as follows (Ex: media interview, educational production and/or photograph):

_______________________________________________________________________________

4. I understand that news organizations are not covered by federal privacy regulations and that the information described above will likely be redisclosed by the media and no longer protected by the federal privacy regulations.

5. I understand that I may request cessation of recording or filming at any time.

6. As described in the UC Health Notice of Privacy Practices, I understand that I may revoke this authorization in writing at any time, except to the extent that action has been taken by the UC Academic Health Center in reliance on this authorization, by sending a written revocation to:

University of Cincinnati
Advanced Medical Imaging Technology
3202 Eden Avenue
Cincinnati, OH 45267

7. This authorization will not expire on any specific date, unless indicated here:

_______________________

8. I understand that I am not required to sign this authorization form.

Patient Name

_______________________
Signature of Patient (Or Patient’s Representative) Date

_______________________
Signature UC Representative or Student Date

□ Copy to Medical Records □ Copy to Patient □ Copy to Public Relations
Special Notes

**Clinical Affiliate Protocols and Procedures**
This Student Manual includes a great deal of information that the Advanced Medical Imaging Technology Student needs to know during their professional curriculum but it is not all-inclusive. Students may be rotating through numerous clinical affiliates. It is not unreasonable to assume that specific procedures will vary from institution to institution. Consequently, each student is **REQUIRED** to familiarize themselves with the methods of operation of each separate clinical affiliate.

**STUDENTS ARE URGED TO PAY SPECIAL ATTENTION TO THE CORRECT MEANS OF RESPONDING TO EMERGENCY SITUATIONS AT EACH INDIVIDUAL CLINICAL AFFILIATE. AN IMPROPER RESPONSE MAY MEAN THE DIFFERENCE BETWEEN LIFE AND DEATH.**

Several of the clinical sites have specific requirements the students must complete before beginning their rotation. These requirements include but are not limited to, background checks, online quizzes and immunization records. If you do not complete the requirements before the deadline established by the program and the clinical site, you will not be permitted to begin your clinical rotation. The student will be responsible for making up time missed at time and a half.

**Grading**
Grades are submitted each semester and are straightforward in their issuance. Some exceptions are as follows:

The grades for Directed Practice will be based upon technologists’ evaluation of the student’s clinical performance, meeting the minimum number of mandatory and elective clinical competencies, meeting the minimum number of mandatory clinical hours, and the completion of case studies. A minimum number of technologist evaluations each semester must be submitted before a final grade can be derived. The number and type of clinical competencies and clinical performances will be established by the individual program directors.

Due to the cumulative nature of our courses, any grade of "I" received for any professional curriculum course must be remedied before the end of the following semester. Unresolved grades of "I" will be converted to "F" and the student will be dropped from the AMIT program.

Should a student feel or notice that an incorrect grade was given, they should consult the faculty member giving the grade immediately. Should it turn out that the grade is incorrect, the instructor will submit a change of grade. However, if a student fails to bring the incorrect grade to the attention of the instructor before the end of the following semester, the grade will NOT be changed regardless of whether it is correct or not.
**UC Testing Services**
AMIT Program faculty will attempt to accommodate students who need to reschedule examinations due to illness, clinical rotation attendance, etc. However, if the instructor is not available for an alternate time it will be the responsibility of the student to schedule their examination through the UC testing services office. All fees will be at the expense of the student.

[https://www.uc.edu/testingservices.html](https://www.uc.edu/testingservices.html)

**Student Technology Expectations**
The personal computer has revolutionized the delivery of education at all levels. As such, the personal computer is an integral part of the education and communication of this department. Students are expected to have reasonable use and access to personal computers, Blackboard Class Web page, the internet, University of Cincinnati email, and University Library electronic resources.

Should the student not have a computer or be deprived of a computer due to malfunction or other reasons beyond their control, the student is still expected to gain computer, internet, and email access through friends, family, libraries, the college and university computer laboratories, or other resources.

A lack of access to these tools will not be an acceptable excuse for missed work, missed assignments, or missed communications.

**Student Health**

**Immunization Records**
You will need to provide medical records and begin your vaccination series with University Health Services. Please keep in mind that compliance with University Health Services is mandatory and is a requirement driven by the demands of our clinical sites. Students found to be not in compliance with University Health Services will not be able to attend clinical rotations and hence, will be dismissed from the program. **All of this information must be submitted by July 31st. Keep a copy of all records turned into University Health.** Many clinical sites will also ask for this information, and it is easier to keep copies than to try and get the information back from the office.

All University Health Services records information can be found online at the website link below. Each student will be supplied with a med+proctor login to upload their immunization records. Each student will be charged a one time $20 records compliance verification fee on their student bursar account bill on November 1st for the use of this required service.

[http://med.uc.edu/uhs/vaccination/CAHS](http://med.uc.edu/uhs/vaccination/CAHS)

Second year students are not required to submit their immunization records again. However, second year students must submit an annual TB test (due August 31st) and flu vaccination (due November 14th) to University Health Services or they will be charged a tracking fee.
**Flu Vaccination**
All clinical sites have the right to require flu vaccinations for all employees and students, with or without prior warning. Compliance is mandatory. Should a student refuse to comply with this request, students may not be allowed to attend those clinical sites with that requirement. Due to the pervasive nature of this policy, students refusing or unable to obtain the flu vaccination are responsible for securing a clinical site willing to waive this requirement.

**CPR**
All students are required to maintain CPR certification throughout the program. If a student allows their CPR card to expire, they will not be allowed to continue clinical rotations until their certificate is renewed. Students will be required to make up clinical time at time and a half if this occurs. Depending upon the timing and the amount of time needing to be made up, it is possible that the student may not have the opportunity to make up the clinical time in time for advancement or graduation.

**Security Clearance**
National and state background checks are required to be completed yearly for all MRI and Nuclear Medicine students. You will need to go to the University’s Public Safety office, 4 Edwards Center on main campus, to complete the application. You will need to supply your Driver’s license, SSN, address and payment. As of this writing, the national background check costs $34 and the Ohio state background check is $32 and is subject to change. Your records will be available for pickup, within 24 hours of applying. If you have previous misdemeanor or felony charge/conviction against you, it may take longer for your background check to be available for pickup. Background checks must be submitted to your instructor by September 12th.

**Drug Screening**
Nationally, there is a movement toward testing for the use of illicit drugs. It is possible that clinical sites may begin this requirement. Should this occur, students must comply with and meet the requirements of the drug testing policies established by the clinical site and the AMIT program. Drug screen can occur for a pre-clinical start requirement or a for-cause compliance.

**Board Examination Ethics Review**
Pre-previous convictions may affect board eligibility – Pre-application ethics reviews should be submitted to appropriate national boards to determine eligibility. If you have a previous conviction or charge on your record it might be necessary to complete the pre-application review before taking your registry exams. We do not want any students to go through the entire year of a modality and then find they are not eligible to take their registry exam. Each registry has a varied review process; please see the links below:


ADVANCED MEDICAL IMAGING TECHNOLOGY
CLINICAL AFFILIATIONS

The Advanced Medical Imaging Technology Program has established clinical affiliation agreements throughout the Cincinnati Region.

JRCNMT Approved Clinical Sites for Nuclear Medicine:

- Children’s Hospital Medical Center* - http://www.cincinnatichildrens.org/
- The Christ Hospital - http://www.thechristhospital.com/
- Dearborn County Hospital - http://www.dch.org/
- The Jewish Hospital - http://www.jewishhospitalcincinnati.com/
- St. Elizabeth Medical Center (Edgewood, Florence, Fort Thomas) - http://www.stelizabeth.com/
- University Hospital - http://universityhospital.uchealth.com/
- Veteran's Administration Medical Center - http://www.cincinnati.va.gov/

*This is a listing of the current clinical affiliates of the Advanced Medical Imaging Technology Program. Students will not rotate to every clinical site. The amount of time spent at each rotation may vary between individual sites. Site start times may vary between individual sites. Not all modalities go to every clinical site.
ADVANCED MEDICAL IMAGING TECHNOLOGY
CLINICAL AFFILIATIONS

The Advanced Medical Imaging Technology Program has established clinical affiliation agreements throughout the Cincinnati Region.

JRCERT Approved Clinical Sites for MRI:

- Children’s Hospital Medical Center* - http://www.cincinnatichildrens.org/
- The Christ Hospital - http://www.thechristhospital.com/
- Dearborn County Hospital - http://www.dch.org/
- Fort Hamilton Hospital - http://www.ketteringhealth.org/forthamilton/
- Good Samaritan Outpatient Center Glenway - https://www.trihealth.com/hospitals-and-practices/good-samaritan-outpatient-center-glenway/
- Pro Scan Imaging (Eastgate, Mason, Midtown, Troy, Paul Brown Stadium, Tri-County, Tylersville, Westside) - https://proscan.com/physician-resources/imaging-centers/
- St. Elizabeth Medical Center (Florence, Fort Thomas) - http://www.stelizabeth.com/
- University of Cincinnati Medical Center & 3T Imaging Center - http://universityhospital.uchealth.com/
- UC Health West Chester - http://uchealth.com/westchesterhospital/

*This is a listing of the current clinical affiliates of the Advanced Medical Imaging Technology Program. Students will not rotate to every clinical site. The amount of time spent at each rotation may vary between individual sites. Site start times may vary between individual sites. Not all modalities go to every clinical site.
Clinical Site Policies

Transportation Policy:
All students are required to have reliable transportation to and from their clinical site rotations. Shall a student’s transportation become unreliable it is the students responsibility to resolve the issue. The AMIT program cannot guarantee any rotation changes due to transportation issues.

Insurance Policy:
All AMIT students are covered under the University of Cincinnati’s professional insurance policy. Policy information is given to clinical sites upon request annually. In the event that a student needs a copy of this policy information please see the program clinical coordinator.

Accident Policy:
In the event of an accident at a clinical site facility, please notify the AMIT program clinical coordinator. All incidents will be handled individually with the program, the clinical affiliate and the student involved. All information regarding the accident will be kept confidential.

Needle stick Policy:
In the event of an accidental needle stick, please notify the AMIT program clinical coordinator. All incidents will be handles individually with the program, the clinical affiliate and the student involved. All information regarding the accident will be kept confidential.

Clinical Leave of Absence Policy: (military duty, jury duty, bereavement, vacation, pregnancy or illness)
Students requesting an extended leave of absence will need to submit their request in writing to the AMIT program director. All efforts will be made to accommodate such request but cannot be guaranteed.

No Tobacco Policy:
Student must abide by all individual clinical site smoking policies. This includes but is not limited to, cigarettes, e-cigarettes, marijuana, etc.

Venipuncture policy:
Students must abide by all individual clinical site venipuncture policies.

HIPAA Policy:
At no time are students to discuss patients or their conditions with anyone who is not directly involved with the patient’s care. All students must complete any and all HIPAA compliance training for their assigned clinical sites. Any student found not complying with HIPPA regulations could result in being removed from their clinical site and/or the AMIT program. HIPAA violations also apply to all classroom assignments and case studies. Patient information and images must remain anonymous when being used by students for assignments.
# 2018 - 2019 Academic Calendar

## Fall Semester 2018

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes begin</td>
<td>Monday, August 27</td>
</tr>
<tr>
<td>Holiday: Labor Day</td>
<td>Monday, September 3</td>
</tr>
<tr>
<td>Fall Reading Days (regular classes</td>
<td>Thursday - Friday, October 11 - 12</td>
</tr>
<tr>
<td>suspended; co-curricular activities</td>
<td></td>
</tr>
<tr>
<td>continue)</td>
<td></td>
</tr>
<tr>
<td>Holiday: Veterans Day</td>
<td>Monday, November 12</td>
</tr>
<tr>
<td>Holiday: Thanksgiving Weekend</td>
<td>Thursday - Sunday, November 22 - November 25</td>
</tr>
<tr>
<td>Examinations</td>
<td>Monday - Saturday, December 10 - 15</td>
</tr>
</tbody>
</table>

## Spring Semester 2019

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes begin</td>
<td>Monday, January 14</td>
</tr>
<tr>
<td>Holiday: Dr. Martin Luther King Jr.’s</td>
<td>Monday, January 21</td>
</tr>
<tr>
<td>Birthday</td>
<td></td>
</tr>
<tr>
<td>Spring Break</td>
<td>Monday - Sunday, March 18 – 24</td>
</tr>
<tr>
<td>Examinations</td>
<td>Saturday - Thursday, April 27 - May 2</td>
</tr>
</tbody>
</table>

## Summer Semester 2019

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes begin</td>
<td>Monday, May 13</td>
</tr>
<tr>
<td>Holiday: Memorial Day</td>
<td>Monday, May 27</td>
</tr>
<tr>
<td>Holiday: Independence Day</td>
<td>Thursday, July 4</td>
</tr>
<tr>
<td>Examinations</td>
<td>Last day of class</td>
</tr>
</tbody>
</table>
University of Cincinnati Student Resources

Accessibility Services (formerly Disability Services): http://www.uc.edu/aess/disability.html

Counseling & Psychological Services: http://www.uc.edu/counseling/services.html

Learning Assistance Center: http://www.uc.edu/aess/lac/resource.html

Testing Center - http://www.uc.edu/testingservices.html

Student Wellness Center: http://www.uc.edu/wellness.html

UCIT Help Desk - https://www.uc.edu/ucit/help.html

UC Women’s Center: http://www.uc.edu/ucwc.html

LGBTQ Center: http://www.uc.edu/lgbtq.html

Veterans’ Programs & Services: http://www.uc.edu/aess/vps.html

Student Activities and Leadership Development: http://www.uc.edu/sald.html

Please note, this is not an all-inclusive list of UC student resources and services. Additional programs and services can be found: http://www.uc.edu/sa.html
Clinical Competencies
Magnetic Resonance Imaging Didactic and Clinical Competency Requirements
MRI Practice Standards

The practice of magnetic resonance is performed by a segment of health care professionals responsible for the use of radiofrequencies (RFs) within a magnetic field on humans and animals for diagnostic, therapeutic or research purposes. A magnetic resonance technologist performs magnetic resonance procedures at the request of and for interpretation by a licensed independent practitioner.

The complex nature of disease processes involves multiple imaging modalities. Although an interdisciplinary team of clinicians, magnetic resonance technologists and support staff plays a critical role in the delivery of health services, it is the magnetic resonance technologist who performs the magnetic resonance examination that creates the images needed for diagnosis.

Magnetic resonance integrates scientific knowledge, technical competence and patient interaction skills to provide safe and accurate procedures with compassion. A magnetic resonance technologist recognizes patient conditions essential for the successful completion of the procedure.

Magnetic resonance technologists must demonstrate an understanding of human anatomy, human physiology, pathology, pharmacology and medical terminology. They must maintain a high degree of accuracy in positioning and magnetic resonance technique. Magnetic resonance technologists must possess, use and maintain knowledge about magnetic protection and safety. Magnetic resonance technologists independently perform or assist the licensed independent practitioner in the completion of diagnostic, therapeutic, interventional and fusion magnetic resonance procedures. Magnetic resonance technologists prepare, administer and document activities related to medications in accordance with state and federal regulations or lawful institutional policy.

The magnetic resonance technologist is the primary liaison between patients, licensed independent practitioners, and other members of the support team. Magnetic resonance technologists must remain sensitive to the needs of the patient through good communication, patient assessment, patient monitoring and patient care skills. As members of the health care team, magnetic resonance technologists participate in quality improvement processes and continually assess their professional performance.

Magnetic resonance technologists think critically and use independent, professional and ethical judgments in all aspects of their work. They engage in continuing education to include their area of practice to enhance patient care, public education, knowledge and technical competence.

In the AMIT MRI program, all students will employ proper (non-ionizing) radiation and MR safety practices by comprehension of and adhering to the following Food and Drug Administration (FDA) specific absorption rate (SAR) limits when performing MR procedures on patients:
Whole body = 4 watts/kg for 15 minutes exposure average
Head = 3 watts/kg for 10 minutes exposure average
Head & Torso = 8 watts/kg for 5 minutes exposure average
Extremity = 12 watts/kg for 5 minutes exposure average

* The ASRT MRI Practice Standards complete document can be found: https://www.asrt.org/main/standards-regulations/practice-standards/practice-standards
MAGNETIC RESONANCE (MR) ENVIRONMENT SCREENING FORM FOR INDIVIDUALS

The MR system has a very strong magnetic field that may be hazardous to individuals entering the MR environment or MR system room if they have certain metallic, electronic, magnetic, or mechanical implants, devices, or objects. Therefore, all individuals are required to fill out this form BEFORE entering the MR environment or MR system room. Be advised, the MR system magnet is ALWAYS on.

*NOTE: If you are a patient preparing to undergo an MR examination, you are required to fill out a different form.

Date ______/_____/______
Name ____________________________
Last Name __________________________
First Name __________________________
Middle Initial __________________________
Age ______

Address ________________________
City ________________________
State ________________________
Telephone (home) (______) ______
Telephone (work) (______) ______
Zip Code ________________________

1. Have you had prior surgery or an operation (e.g., arthroscopy, endoscopy, etc.) of any kind? □ No □ Yes
   If yes, please indicate date and type of surgery: Date ______/_____/______ Type of surgery ________________________

2. Have you had an injury to the eye involving a metallic object (e.g., metallic slivers, foreign body)? □ No □ Yes
   If yes, please describe: __________________________________________________________

3. Have you ever been injured by a metallic object or foreign body (e.g., BB, bullet, shrapnel, etc.)? □ No □ Yes
   If yes, please describe: __________________________________________________________

4. Are you pregnant or suspect that you are pregnant? □ No □ Yes

WARNING: Certain implants, devices, or objects may be hazardous to you in the MR environment or MR system room. Do not enter the MR environment or MR system room if you have any question or concern regarding an implant, device, or object.

Please indicate if you have any of the following:

- Yes □ No □ Aneurysm clip(s) ( )
- Yes □ No □ Cardiac pacemaker ( )
- Yes □ No □ Implanted cardioverter defibrillator (ICD) ( )
- Yes □ No □ Electronic implant or device ( )
- Yes □ No □ Magnetically-activated implant or device ( )
- Yes □ No □ Neurostimulation system ( )
- Yes □ No □ Spinal cord stimulator ( )
- Yes □ No □ Cochlear implant or implanted hearing aid ( )
- Yes □ No □ Insulin or infusion pump ( )
- Yes □ No □ Implanted drug infusion device ( )
- Yes □ No □ Any type of prosthesis or implant ( )
- Yes □ No □ Artificial or prosthetic limb ( )
- Yes □ No □ Any metallic fragment or foreign body ( )
- Yes □ No □ Any external or internal metallic object ( )
- Yes □ No □ Hearing aid ( )
- Yes □ No □ Other implant ( )
- Yes □ No □ Other device ( )

IMPORTANT INSTRUCTIONS:

Remove all metallic objects before entering the MR environment or MR system room including hearing aids, beeper, cell phone, keys, eyeglasses, hair pins, barrettes, jewelry (including body piercing jewelry), watch, safety pins, paperclips, money clip, credit cards, bank cards, magnetic strip cards, coins, pens, pocket knife, nail clipper, steel-toed boots/shoes, and tools. Loose metallic objects are especially prohibited in the MR system room and MR environment.

Please consult the MRI Technologist or Radiologist if you have any question or concern BEFORE you enter the MR system room.

I attest that the above information is correct to the best of my knowledge. I have read and understand the entire contents of this form and have had the opportunity to ask questions regarding the information on this form.

Signature of Person Completing Form: ____________________________
Date ______/_____/______

Form Information Reviewed By: ____________________________
Print name ____________________________
Signature ____________________________

□ MRI Technologist □ Radiologist □ Other ____________________________

60
AMIT MRI Student Clinical Site Orientation Checklist

This form is to be completed by the Supervising Technologist on the first day of clinical rotation to ensure MRI student technologist has been formally orientated on the items listed below.

Upon completion, MRI student technologist will submit this form to AMIT MRI program faculty.

☐ MRI safety procedures
☐ Quench/Emergency stop/O₂ sensor alarm procedures
☐ Fire safety and procedures
☐ Evacuation procedures
☐ Chemical spill/hazard procedures
☐ HIPAA training
☐ Emergency Overhead Code training
☐ Cardiac/Respiratory Code training and procedures
☐ Electrical hazard procedures
☐ Standard precautions
☐ Venipuncture (if applicable)

______________________________________ DATE

______________________________________ Supervising Technologist Signature

______________________________________ Student Technologist Signature
Student Supervision at Imaging Centers Employing Non-Registered Technologists Policy

All students are required to perform imaging procedures under the direct supervision of a qualified practitioner until the student achieves competency. After achieving competency, students are required to perform imaging procedures under indirect supervision of a qualified magnetic resonance technologist.

JRCERT standards 4.4, 4.5, and 6.2 provides further guidance in “qualified magnetic resonance technologist.” Students are only allowed to work under the direct and indirect supervision from ARRT MR registered technologists. Under no circumstances should students be supervised, either indirectly or directly, by a technologist who is not registered by the ARRT in magnetic resonance imaging. If a student should be in a clinical area without an ARRT MR registered technologist due to clinical instructor or qualified personnel absence, they should contact the program director immediately for clinical reassignment.

Direct supervision is defined as student supervision by a qualified magnetic resonance technologist who reviews the procedure in relation to the student’s achievement, evaluates the condition of the patient in relation to the student’s knowledge, is physically present during the conduct of the procedure, and reviews and approves the procedure and/or image.

Indirect supervision is defined as that supervision provided by a qualified magnetic resonance technologist immediately available to assist students regardless of the level of student achievement. “Immediately available” is interpreted as the physical presence of a qualified magnetic resonance technologist adjacent to the room or location where a magnetic resonance procedure is being performed. This availability applies to all areas where magnetic resonance equipment is in use on patients.

All students are required to perform imaging procedures under the direct supervision of a qualified practitioner until the student achieves competency. After achieving competency, students are required to perform imaging procedures under indirect supervision of a qualified magnetic resonance technologist.

☐ I have read and understand the information in this policy.

_______________________________________
Student Name and Signature

_______________________________________
Date
MRI Clinical Time Sheet

Student Name __________________________   Academic Semester/Year ___________
Week of ______________________________ Clinical Site __________________________

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Time In</th>
<th>Technologist’s Initials</th>
<th>Time Out</th>
<th>Total Hours</th>
<th>Technologist’s Initials</th>
<th>Lunch</th>
<th>Sent Home Early</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Technologist’s signature _________________________________________________
Student’s signature _____________________________________________________

By signing this, I verify the time listed is the actual time I was there.
STUDENT LEAVE AUTHORIZATION

NAME __________________________________________________

TODAY’S DATE ___________ EFFECTIVE DATE ___________

Leave of absence for _______ hours

Reason for Absence:

________________________________________________________________
________________________________________________________________
________________________________________________________________

Time will be made up by:

________________________________________________________________
________________________________________________________________
________________________________________________________________

Documentation attached: YES_____ NO_____

___________________________________________________
STUDENT’S SIGNATURE

___________________________________________________
PROGRAM OFFICIAL’S SIGNATURE
Magnetic Resonance Imaging

1. Introduction

Candidates for certification and registration are required to meet the Professional Education Requirements specified in the ARRT Rules and Regulations. ARRT’s Magnetic Resonance Imaging Didactic and Clinical Competency Requirements are one component of the Professional Education Requirements.

The requirements are periodically updated based upon a practice analysis which is a systematic process to delineate the job responsibilities typically required of staff MRI technologists. The result of this process is a task inventory which is used to develop the clinical competency requirements (see section 4 below) and the content specifications which serve as the foundation for the didactic competency requirements (see section 3 below) and the examination.

2. Documentation of Compliance

To document that the Didactic and Clinical Competency Requirements have been satisfied by a candidate, the program director (and authorized faculty member if required) must sign the ENDORSEMENT SECTION of the Application for Certification and Registration included in the Certification and Registration Handbook.

Candidates who complete their educational program during 2017 or 2018 may use either the 2014 Didactic and Clinical Competency Requirements or the 2017 requirements. Candidates who graduate after December 31, 2018 must use the 2017 requirements.

3. Didactic Competency Requirements

The purpose of the didactic competency requirements is to verify that individuals have the opportunity to develop fundamental knowledge, integrate theory into practice and hone affective and critical thinking skills required to demonstrate professional competency. Candidates must successfully complete coursework addressing the topics listed in the ARRT Content Specifications for the Magnetic Resonance Imaging Examination. These topics would typically be covered in nationally-recognized curricula published by organizations such as the ASRT or SMRT. Educational programs accredited by a mechanism acceptable to ARRT generally offer education and experience beyond the minimum requirements specified here.

4. Clinical Competency Requirements

The purpose of the clinical competency requirements is to verify that individuals certified and registered by the ARRT have demonstrated competency performing the clinical activities fundamental to a particular discipline. Competent performance of these fundamental activities, in conjunction with mastery of the cognitive knowledge and skills covered by the magnetic resonance imaging examination, provides the basis for the acquisition of the full range of procedures typically required in a variety of settings. Demonstration of clinical competence means that the candidate has performed the procedure independently, consistently, and effectively during the course of his or her formal education. The following pages identify the specific procedures for the clinical competency requirements. Candidates may wish to use these pages, or their equivalent, to record completion of the requirements. The pages do NOT need to be sent to the ARRT.
4.1 General Performance Considerations

4.1.1 Patient Diversity

Demonstration of competence should include variations in patient characteristics such as age, gender, and medical condition.

4.1.2 Simulated Performance

The ARRT requirements specify that certain clinical procedures may be simulated as designated in the specific requirements below. Simulations must meet the following criteria:

- The candidate must competently demonstrate skills as similar as circumstances permit to the cognitive, psychomotor, and affective skills required for performing the procedures on patients;
- The program director must be confident that the skills required to competently perform the simulated task will generalize or transfer to the clinical setting, and, if applicable, the candidate must evaluate related images.

Examples of acceptable simulation include: demonstrating CPR on a mannequin; performing venipuncture by demonstrating aseptic technique on another person, but then inserting the needle into an artificial forearm or grapefruit.

4.1.3 Elements of Competence

Demonstration of clinical competence requires that the program director or the program director's designee has observed the candidate performing the procedure independently, consistently, and effectively during the course of the candidate's formal educational program.

4.2 Magnetic Resonance Imaging Specific Requirements

As part of the education program, candidates must demonstrate competence in the clinical activities identified below. These clinical activities are listed in more detail in the following sections:

- Seven mandatory general patient care activities;
- Eight mandatory MRI safety requirements;
- 17 mandatory MRI procedures and 10 electives to be selected from a list of 25 MRI procedures; and
- Seven mandatory quality control tests.
### 4.2.1 General Patient Care

Candidates must have demonstrated competence in all seven patient care activities listed below. The activities should be performed on patients whenever possible, but simulation is acceptable if state or institutional regulations prohibit candidates from performing the procedures on patients.

<table>
<thead>
<tr>
<th>General Patient Care Procedures</th>
<th>Date Completed</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vital Signs (Blood Pressure, Pulse, Respiration)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterile Technique</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard (Universal) Precautions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer of Patient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care of Patient Medical Equipment (e.g., Oxygen Tank, IV Tubing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venipuncture</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4.2.2 MRI Safety Requirements

Candidates must demonstrate competence in all eight areas of MRI Safety listed below.

<table>
<thead>
<tr>
<th>MRI Safety Requirements</th>
<th>Date Completed</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening Patients, Personnel, and Non-Personnel for MRI Safe, Conditional, and Unsafe Devices and Objects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify MRI Safety Zones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Static Field (e.g., Projectiles)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiofrequency Field (e.g., Thermal Loading, Coil Positioning, Patient Positioning, and Insulation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time-Varying Gradient Magnetic Fields (e.g., Induced voltages, Auditory Considerations)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication and Monitoring Considerations (e.g., Sedated Patients, Verbal and Visual Contact, Vital Signs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contrast Media Safety (e.g., NSF, Renal Function)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other MRI Safety Considerations (e.g., Cryogen Safety, Fire, Medical Emergencies, Laser Alignment Lights)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.2.3 MRI Procedures

Candidates must demonstrate competence in the 17 mandatory procedures listed in the following table. For the mandatory procedures, candidates must be evaluated while scanning actual patients. Candidates are also required to demonstrate competence for 10 of the 24 elective procedures. Elective procedures should be performed on patients; however, up to one-half of the elective procedures may be performed on volunteers, as long as your institution has a policy that assures the protection of both the volunteer’s and the institution’s interests.

When performing the MRI procedures the candidate must demonstrate appropriate:

Patient skills including:
- Evaluation of requisition or medical record;
- Patient identification;
- Documentation of patient history including allergies;
- Safety screening; patient assessment;
- Explanation of procedure;
- Appropriate MRI safety procedures; and
- Patient discharge with post-procedure instructions.

Technical and procedural skills including:
- Selection of imaging coil;
- Patient positioning; protocol selection;
- Parameter selection;
- Image display; filming (if applicable);
- Networking; archiving; and
- Documentation of procedure and patient data in appropriate records.

Evaluation skills including:
- Analysis of the image for technical quality;
- Demonstration of correct anatomic regions;
- Recognition of relevant pathology; and
- Proper labeling.
### 4.2.3 MRI Procedures (continued)

<table>
<thead>
<tr>
<th>MRI Procedures</th>
<th>Mandatory</th>
<th>Elective</th>
<th>Date Completed</th>
<th>Patient or Simulated</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head and Neck</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brain</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAC</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orbit</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pituitary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head MRA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Face/Soft Tissue Neck (e.g., Parotids, Thyroid)</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neck MRA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cervical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoracic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lumbar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sacrum/Coccyx</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brachial Plexus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thorax</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breast</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoracic MRA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdomen and Pelvis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdomen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRCP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdominal MRA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft Tissue Pelvis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elbow</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand/Wrist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finger/Thumb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hip</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 4.2.3 MRI Procedures (continued)

<table>
<thead>
<tr>
<th>MRI Procedures</th>
<th>Mandatory or Elective</th>
<th>Date Completed</th>
<th>Patient or Simulated</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Musculoskeletal (continued)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bony Pelvis</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SI Joints</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ankle/Foot</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoulder</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scapula</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sternum/VSC</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fore Foot</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humerus</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forearm</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Femur</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Leg</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knee</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporomandibular Joint</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR Arthrography</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Imaging Procedures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRV</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image Post-Processing</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremity MR Angiography</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spectroscopy</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 4.2.4 Quality Control Procedures

Candidates must demonstrate competence in the seven quality control activities listed below. The first four procedures are performed on a QC phantom.

<table>
<thead>
<tr>
<th>Quality Control Procedures</th>
<th>Date Completed</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal to Noise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Center Frequency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transmitter Gain or Attenuation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geometric Accuracy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment Inspection (e.g., Coils, Cables, Door Seals)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitor Cryogen Levels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room Temperature</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Magnetic Resonance Imaging Clinical Experience Requirement

## Procedures Verification Form

<table>
<thead>
<tr>
<th>Category &amp; Procedure</th>
<th>Date Performed</th>
<th>Time</th>
<th>Facility Name</th>
<th>Technologist Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine Brain - M</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine Brain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine Brain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine Brain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine Brain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Auditory Canal-M</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Auditory Canal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Auditory Canal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Auditory Canal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orbits - E</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orbits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orbits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orbits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orbits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orbits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pituitary - M</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pituitary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pituitary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pituitary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pituitary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*EXAMPLE Only – Official Verification Form can be found on Blackboard*
MRI Student Competency Evaluation

Student: __________________  Scan Competency: _____________
Clinical Rotation: ______________  Date: ______________
Supervising Technologist: ____________________________

Patient Care Skills

- Evaluation of requisition or medical record
- Patient identification
- Documentation of patient history (including allergies)
- Safety Screening
- Patient assessment
- Explanation of procedure
- Appropriate MRI safety procedures
- Patient discharge with post-procedure instructions

<table>
<thead>
<tr>
<th>Patient Care Skills</th>
<th>Acceptable</th>
<th>Not Acceptable</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Technical and Procedural Skills

- Selection of imaging coils
- Patient positioning
- Protocol selection
- Parameter selection
- Image display
- Filming (if applicable)
- Networking
- Archiving
- Documentation of procedure/patient data in appropriate records

<table>
<thead>
<tr>
<th>Technical and Procedural Skills</th>
<th>Acceptable</th>
<th>Not Acceptable</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evaluation Skills

- Analysis of the image for technical quality
- Demonstration of correct anatomic regions
- Recognition of relevant pathology
- Proper image labeling

<table>
<thead>
<tr>
<th>Evaluation Skills</th>
<th>Acceptable</th>
<th>Not Acceptable</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Is the student capable in performing this examination without direct assistance?
☐ YES  ☐ NO

______________________________________ Supervising Technologist Signature

______________________________________ Student Technologist
MRI Clinical Evaluation Report

Student name ______________________________________ Date _____________
Clinical site _____________________ Semester/Year _____________
Technologist ________________________________________

Please evaluate the University of Cincinnati MRI students on the following with 1 being poor, 2 being average, 3 being good, and 4 being excellent. Please grade the student on where they should be based on how far they are in the program.

<table>
<thead>
<tr>
<th>Answer Scale</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 N/A</td>
<td>1. Does the student dress appropriately and according to UC’s uniform policy? Is the student punctual?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>2. Does the student get along well with staff/communicate well with physicians?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>3. Does the student take constructive criticism well?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>4. Does the student seek guidance about things he/she doesn’t understand?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>5. Does the student display or express enthusiasm to learn?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>6. Does the student show initiative (i.e., bringing patients to MR, screening patients, setting up exams, running scans, either with assistance or on their own?)</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>7. Does the student assist in stocking scan room and help in maintaining the equipment?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>8. Does the student select the correct coils, protocols, sequences, and parameters for the exam?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>9. Is the student interested in helping with exams?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>10. Does the student properly evaluate the requisition and/or medical records?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>11. Does the student obtain necessary information before beginning an exam with regard to patient history/MR screening/patient ID?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>12. Does the student explain the procedure to patients prior to scan?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>13. Does the student demonstrate appropriate knowledge in image display, filming, and archiving?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>14. Does the student employ proper MRI safety procedures and precautions?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>15. Does the student employ Universal Precautions when necessary?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>16. Does the student evaluate the resulting images for image quality?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>17. Does the student evaluate the resulting images for optimal demonstration of anatomic region?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>18. Does the student evaluate the resulting images for proper identification on images and patient data?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>19. Does the student evaluate the resulting images for exam completeness?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>20. Does the student assist the patient in dressing/undressing/help onto MR scanner table as necessary?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>21. Does student prepare scan room and position the patient properly?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>22. Does the student show technical proficiency?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>23. Does the student show technical knowledge?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>24. Does the student talk to the patient during the exam, letting them know of the scanner noises and directions (i.e., “please hold still”, “noise for 4 minutes”, “How are you doing? etc.”)</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>25. Is the student discreet about asking the technologist questions in front of the patient?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>26. Does the student explain the procedure to the patient to make the patient more comfortable?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>27. Does the student refrain from inappropriate patient communication?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>28. Is the student courteous to patients?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>29. Does the student make good use of his/her time?</td>
</tr>
<tr>
<td>1 2 3 4 N/A</td>
<td>30. The student can analyze the need to modify standard procedures and technical factors to accommodate patient conditions and other variables.</td>
</tr>
</tbody>
</table>
What are the strengths of this student?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Areas for improvement?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Any other comments?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Technologist signature ________________________________
Date_________________________
Student Evaluation of Clinical Site

Student Name _________________________             Date ____________
Clinical Site ________________________
Dates from _____________________    to ________________

Circle the answer that best describes your feelings for the following questions.

Was this site     Too Slow             Just Right                 Too Busy?

Comments ____________________________

Were the technologists helpful?            Yes      No

Comments ____________________________

Were the physicians helpful?   Yes   No   N/A

Comments ____________________________

Was the technologist-student relationship  Excellent  Average  Poor

Comments ____________________________

Would you recommend this site again?            Yes              No

Comments ____________________________
# MRI Physics Individual Case Study Presentation Form Rubric

**Name:** ___________________________  **Date:** ___________________________

Case studies are a necessary component of medical education to correlate didactic classes with clinical experience. It also enables students in the class to see pathology that they may not have otherwise seen in their particular clinical experience. This method allows the student to have the experience to research a particular disease in more depth than class time allows. As such, you will be expected to use outside resources for more in-depth knowledge of the disease process to help you prepare a more professionally developed case study.

Grading Scale: 15 total sections to be graded on (worth 10 points each), for a total of 150 points.

- 4 excellent – 10 points
- 3 good, but not complete – 7.5 points
- 2 fair, needs significant work – 5 points
- 1 poor or non-existing – 2.5 or 0 points

## Preparation

<table>
<thead>
<tr>
<th></th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient history (patient’s medical history)</td>
<td>4 3 2 1</td>
</tr>
<tr>
<td>Clinical signs and symptoms/Primary diagnosis(reason for MR exam)</td>
<td>4 3 2 1</td>
</tr>
<tr>
<td>Lab values and other data vs. Normal values (if applicable)</td>
<td>4 3 2 1</td>
</tr>
<tr>
<td>Correlation with other imaging modalities and testing (if patient had prev. exams)</td>
<td>4 3 2 1</td>
</tr>
<tr>
<td>Correlation with previous MRI examination (if applicable)</td>
<td>4 3 2 1</td>
</tr>
</tbody>
</table>

## Presentation

<table>
<thead>
<tr>
<th></th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation of MR protocol/Techniques/MR scanner type and field strength</td>
<td>4 3 2 1</td>
</tr>
<tr>
<td>MR image clarity and explanation</td>
<td>4 3 2 1</td>
</tr>
<tr>
<td>Identification of anatomy and pathology (from x-rays, MR, CT, etc.)</td>
<td>4 3 2 1</td>
</tr>
<tr>
<td>Organization of presentation</td>
<td>4 3 2 1</td>
</tr>
<tr>
<td>Communication/presentation skills</td>
<td>4 3 2 1</td>
</tr>
</tbody>
</table>

## Conclusion

<table>
<thead>
<tr>
<th></th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiologist’s report included and discussed.</td>
<td>4 3 2 1</td>
</tr>
<tr>
<td>Treatment of patient (if available). If not, discuss treatment in general for topic</td>
<td>4 3 2 1</td>
</tr>
<tr>
<td>Prognosis of patient (if available)</td>
<td>4 3 2 1</td>
</tr>
<tr>
<td>Knowledge of anatomy/pathology/physiology as it pertains to specific topic.</td>
<td>4 3 2 1</td>
</tr>
<tr>
<td>Resources (at least 3)</td>
<td>4 3 2 1</td>
</tr>
</tbody>
</table>

**Comments:**

______________________________________________________________________________________________________________________________________________________________________________________________________________________

______________________________________________________________________________________________________________________________________________________________________________________________________________________

______________________________________________________________________________________________________________________________________________________________________________________________________________________

**Score:** ________/150
MRI Clinical Uniform:

1. Solid color scrub top/bottom combination.

2. White lab coat (for Nuclear Medicine it needs to be long sleeved and down to mid-thigh). You can buy one for all modalities. For MRI, it needs to be mid-thigh or shorter, long or short sleeved is fine.

3. Shoes should be either white nursing shoes or all white gym shoes with white laces worn only for clinical rotations. (Nuclear Medicine requires closed toe and heel). No crocs are allowed.

4. Socks should be white.

5. No jackets or sweatshirts will be permitted during clinical hours unless they are scrub jackets.

6. Name badge should be worn at all times.

7. No unusual hair colors or styles.

8. No visible tattoos.

9. No earrings are allowed during MRI clinical rotations, unless approved by clinical site. Please check with your clinical site supervisor and let me know if they approve of the wearing of earrings. Otherwise, do not wear them - some earrings are ferrous, and thus should be avoided.

10. Conservative face makeup.

11. Only rings permitted are wedding rings.

12. No artificial fingernails. Nails must be free of polish, or polish must be free of chips.

13. No perfume or aftershave is to be worn.

14. Beards and mustaches must be well groomed and clean.

15. No necklaces or bracelets.

16. No sunglasses are permitted.

17. No head coverings of any type unless dictated by your religion and approved by the instructor.

18. No bobby pins or hair clips.

** Additions to this policy may be made at the discretion of the instructor as situations arise.
Clinical Competencies
Nuclear Medicine Technology Didactic and Clinical Competency Requirements
The spectrum of responsibilities for a nuclear medicine technologist varies widely across the United States. Practice components presented in this document provide a basis for establishing the areas of knowledge and performance for the nuclear medicine technologist. The nuclear medicine technologist must be in compliance with all federal, state, and institutional guidelines, including proper documentation of initial and continued competency in those practices and activities.

Continuing education is a necessary component in maintaining the skills required to perform all duties and tasks of the nuclear medicine technologist in this ever-evolving field.

The Nuclear Medicine Technologist Scope of Practice and Performance Standards document is intended to set forth the standards in important areas of the nuclear medicine technologist’s responsibilities. It may not cover all areas which may present themselves in actual practice. These standards do not supersede the judgment of the individual nuclear medicine technologist and other healthcare professionals serving the patient in light of all of the facts of the individual case. THE SOCIETY OF NUCLEAR MEDICINE AND MOLECULAR IMAGING AND THE SOCIETY OF NUCLEAR MEDICINE AND MOLECULAR IMAGING TECHNOLOGIST SECTION DISCLAIM ALL LIABILITY ARISING FROM USE OF THESE DOCUMENTS.

NMT Scope of Practice and Performance Standards - Approved June 2016

* The full scope of practice article can be found on the SNMMI website: http://www.snmmi.org/Technologists.aspx
Nuclear Medicine Clinical Time Sheet

Student Name __________________________ Academic Semester/Year ________________

Week of ________________  Clinical Site ___________________________

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Time In</th>
<th>Technologist’s Initials</th>
<th>Time Out</th>
<th>Total Hours</th>
<th>Technologist’s Initials</th>
<th>Lunch</th>
<th>Sent Home Early</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Technologist’s signature ______________________________________________________

Student’s signature ________________________________________________________

By signing this, I verify the time listed is the actual time I was there.
STUDENT LEAVE AUTHORIZATION

NAME ________________________________________________

TODAY’S DATE ________ EFFECTIVE DATE ____________

Leave of absence for ________ hours

Reason for Absence:
____________________________________________________
____________________________________________________
____________________________________________________

Time will be made up by:
____________________________________________________
____________________________________________________
____________________________________________________

Documentation attached: YES____ NO____

___________________________________________________
STUDENT’S SIGNATURE

___________________________________________________
PROGRAM OFFICIAL’S SIGNATURE
Nuclear Medicine Technology

Introduction
Candidates for Certification or Registration are required to meet the professional education requirements of the American Registry of Radiologic Technologists – Nuclear Medicine Technology (ARRT) and the Nuclear Medicine Technology Certification Board (NMTCB).

The requirements are updated by the ARRT and NMTCB approximately every five years through a practice/task analysis. These organizations are independent and conduct their analyses on their own timelines.

The following requirements are adopted from the ARRT and the NMTCB and comprise the Nuclear Medicine Technology Program Competency Requirements. All must be completed satisfactorily before students can progress further. Students who do not complete all competencies have not satisfied program requirements and will receive a grade of “I” or “F” (at the Instructor’s discretion) in Directed Practice III. Students earning an “I” or “F” will not be eligible for board examination, program advancement or graduation.

The purpose of clinical competency requirements is to verify examinees have demonstrated the competencies that a new graduate can realistically expect to encounter in their day-to-day duties as an entry-level nuclear medicine technologist. Demonstration of a clinical competency means the student is able to perform the procedure from beginning to end independently while under supervision.

A number of procedures will be designated as (Elective/Simulated/Observed – E/S/O). The reason for this is that some procedures are performed infrequently and the student may not have enough opportunities to perform the procedure independently from beginning to end.

For simulation, the student must simulate the procedure in a realistic manner. Examples of acceptable simulation would include CPR on a mannequin, demonstrating proper aseptic technique on another person by performing the venipuncture on a mannequin, or administering a non-radioactive drink to someone simulating a thyroid therapy and then scanning an actual patient.

Observations will only be considered acceptable under the most extreme of circumstances and students should strive to have NO procedures completed in this manner. To fulfill the criteria of observation, students must observe the entire procedure from beginning to end and participate in some of the administration and imaging. It will be the sole discretion of the clinical preceptor to determine if the student understands the procedure as well as needed by an entry-level technologist.

Each procedure completed (actual, simulated, observed) may only be counted once. For example, a SPECT brain scan performed on a patient for brain death can either be counted as a brain death OR a SPECT brain, not both. Additional opportunities to complete elective procedures may be available within the classroom via journals, case studies and/or assignment completion.
## Patient Care Procedures

<table>
<thead>
<tr>
<th>Patient Care Procedures</th>
<th>Date Completed</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>*All 6 Required</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPR Certified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vital Signs – Blood Pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vital Signs - Pulse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vital Signs - Respiration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venipuncture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECG (e.g. Lead Placement and Recognition of Common Dysrhythmias)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Quality Control Procedures

<table>
<thead>
<tr>
<th>Quality Control Procedures</th>
<th>Date Completed</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>*All 5 Required</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPECT Gamma Camera (Uniformity, Resolution, and Center of Rotation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dose Calibrator (Constancy and Linearity)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well Counter/Uptake Probe (Energy Calibration)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey Meter (Battery Check and Constancy)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET or PET/CT (Reference or Blank Scan)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Nuclear Medicine Procedures

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Date Complete</th>
<th>Patient, Simulated, Observed</th>
<th>Competence Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abscess and Infection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gallium (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WBC Imaging</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone (Skeletal)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited Planar/Static</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three Phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four Phase (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whole Body</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone SPECT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NaF PET (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiovascular</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gated Blood Pool Study - MUGA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myocardial Perfusion Stress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myocardial Perfusion Rest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiac PET or PET/CT (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiac MIBG (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Nervous System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brain Planar or SPECT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brain or Brain Death Flow/Dynamic (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brain Death SPECT (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DaT Scan (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cisternography – Routine (Injection S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cisternography – CSF Leak (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shunt Patency (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brain PET or PET/CT (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$^{18}$F flurbetaben, flurbetapir, flutemetabol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT Imaging Procedures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attenuation Correction/Anatomical Loc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnostic CT (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endocrine/Exocrine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adrenal Scan (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thyroid Uptake</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thyroid Scan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thyroid Metastatic Survey</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parathyroid – Planar or SPECT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear Medicine Procedures</td>
<td>Date Complete</td>
<td>Patient, Simulated, Observed</td>
<td>Competence Verified By</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------------</td>
<td>------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>(E/S/O) = Elective/Simulated/Observed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gastrointestinal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatobiliary without GBEF (Bile Leak)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatobiliary with GBEF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gastroesophageal Reflux (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gastric Emptying (Solid or Liquid)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GI Bleeding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meckel’s Diverticulum (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liver/Spleen Planar or SPECT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peritoneal Shunt Patency (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y-90 Liver-Lung Shunt Mapping (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemangioma (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Genitourinary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renogram without Lasix</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renogram with Lasix</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renogram Captopril (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renal Cortical Planar or SPECT (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective Renal Plasma Flow (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glomerular Filtration Rate (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radionuclide Cystogram (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perfusion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ventilation Gas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ventilation Aerosol (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative VQ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Therapeutic Procedures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thyroid Ablation (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thyroid Hyperthyroidism (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palliative Bone (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monoclonal Antibody (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Embolic Radiation Therapy (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tumor</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gallium Planar or SPECT (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lymphoscintigraphy (Injection S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monoclonal Antibody (MAB) (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peptide Imaging (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuroendocrine Imaging - MIBG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuroendocrine Imaging - Octreoscan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breast Imaging (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tumor SPECT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET or PET/CT F18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET or PET/CT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$^{68}$Ga Dotatate (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear Medicine Procedures</td>
<td>Date Completed</td>
<td>Patient, Simulated, Observed</td>
<td>Competence Verified By</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------</td>
<td>-----------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Hematopoietic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone Marrow Imaging (E/S/O)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
WRITE UP FOR NUCLEAR MEDICINE PROCEDURES

THIS FORM IS TO BE COMPLETED BY THE STUDENT AND GIVEN TO PROGRAM OFFICIALS. USE THE BACK OF THIS PAGE IF NECESSARY. DO NOT INCLUDE ANY PATIENT NAMES OR NUMBERS THAT MAY BE LINKED TO A SPECIFIC PATIENT.

Student: ________________________ Study: _________________________________________

Location: ________________________ Supervising Technologist/Faculty: __________________

Select One: Patient Simulated Observed Journal In-Class

1. Relevant Patient Information (e.g. Reason for admission, diagnosis, age. Is patient deaf, blind, obese, paralyzed, comatose, etc.):

2. What is the clinical question?

3. What are the isotopes utilized and how are they administered? Are there alternative radiopharmaceuticals available that would yield the same or similar information? Why were these not used?

4. Is there any special patient prep (i.e., hydration, NPO, etc.).

5. Describe techniques used for scanning and why (e.g., was patient supine, upright, inclined, imaging time, delay time, images acquired, etc.).

6. Acquisition parameters utilized on the camera and computer (camera position, matrix, zoom, imaging time, etc.):

7. Critique the technical outcome of scan and why it appeared as such (e.g., were the pictures ideal or could something been done to make them better, was the quality compromised by the patient's condition, etc.).

*Include image examples for simulation and journal write-ups.
<table>
<thead>
<tr>
<th></th>
<th>Performance Skills</th>
<th>Acceptable</th>
<th>Simulated</th>
<th>Observed</th>
<th>Write-Up</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Check requisition/order</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Patient interaction (explain test, reassure patient)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Signed pregnancy/nursing statement (if applicable)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Patient history noted/obtained</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Prepare radiopharmaceutical kit (if applicable)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Calibrate and log radiopharmaceutical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Set up gamma camera and/or other instrumentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Set up computer/Select correct acquisition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Patient identification (2 means)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Administer radiopharmaceutical by appropriate route</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Position patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Image patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Organization of procedure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Check images and take/suggest additional views if necessary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Post process images (if applicable)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Check images with physician (if applicable)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Give patient post-image instructions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Clean up area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Performance</td>
<td>Acceptable</td>
<td>Simulated</td>
<td>Observed</td>
<td>Write-Up</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------</td>
<td>-----------</td>
<td>----------</td>
<td>----------</td>
<td>-----</td>
<td></td>
</tr>
<tr>
<td>1 Student performs all stated objectives without instruction from senior technologist (attitudinal consideration)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Student applies basic understanding and reasoning in performance of all stated objectives (cognitive consideration)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Student demonstrates coordination and efficiency associated with the physical performance of all stated objectives (psychomotor consideration)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SIGNATURES**

______________________STAFF TECHNOLOGIST

______________________STUDENT TECHNOLOGIST

90
TECHNOLOGIST/FACULTY GUIDELINES FOR STUDENT EVALUATIONS

Student Evaluations are divided into eight general categories. They are as follows:

- Initiative
- Professional Demeanor
- Attitude
- Interest
- Patient Rapport
- Technical Proficiency
- Technical Knowledge
- Staff Rapport

The numbers 0-4 will be used to evaluate the student's performance in each one of the categories. The meaning associated with these numbers are as follows:

A. **4 = EXCELLENT** The student performs in a clearly superior manner. This person is on track to become a superior technologist.

B. **3 = GOOD** The student is a solid and dependable performer. They continuously strive to do the right thing. This person is on track to become a versatile and dependable technologist.

C. **2 = AVERAGE** This student is usually reliable. Although they possess only a few negative characteristics they likewise possess only a few positive characteristics. This individual is on track to become a dependable and predictable technologist.

D. **1 = POOR** This person is not likely to hurt anyone, however, their current clinical performance leads you to believe that they will not make a trustworthy and competent technologist without significant improvement.

E. **0 = DEFICIENT** This student either has no concept of what is going on (considering the amount of time they have been in the program) or does not perform what is expected (i.e. procedures, conduct, etc.) Their actions lead you to believe that they may hurt a patient due to ineptitude. Without drastic improvement, this person will not make it as a technologist.

F. **- = UNABLE TO RATE** This student has not been observed enough in this category to detect any trends.

At the end of the semester, an average is calculated from all sheets for the semester and this makes up most of the grade the student will receive for the course Directed Practice. The results of the evaluations are shared with the students but the technologist has the option of remaining anonymous. Signatures are requested to document authenticity.

Letter grades are determined as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Numerical Value</th>
<th>Grade</th>
<th>Numerical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3.75 - 4.00</td>
<td>C</td>
<td>2.25 - 2.49</td>
</tr>
<tr>
<td>A-</td>
<td>3.50 - 3.74</td>
<td>C-</td>
<td>2.0 - 2.24</td>
</tr>
<tr>
<td>B+</td>
<td>3.25 - 3.49</td>
<td>D+</td>
<td>1.75 - 1.99</td>
</tr>
<tr>
<td>B</td>
<td>3.00 - 3.24</td>
<td>D</td>
<td>1.50 - 1.74</td>
</tr>
<tr>
<td>B-</td>
<td>2.75 - 2.99</td>
<td>D-</td>
<td>1.25 - 1.49</td>
</tr>
<tr>
<td>C+</td>
<td>2.50 - 2.74</td>
<td>F</td>
<td>1.00 - 1.24</td>
</tr>
</tbody>
</table>

ANY STUDENT RECEIVING AN END OF SEMESTER GRADE BELOW 2.00 (letter grade of C) IN DIRECTED PRACTICE OR TECHNICAL EVALUATION MAY POSE A RISK TO THE SAFETY AND WELL-BEING OF OTHERS AND WILL BE IMMEDIATELY DISMISSED FROM THE PROGRAM.
CLINICAL EVALUATION REPORT
Advanced Medical Imaging Technology Program

Student ______________________________ Faculty/Staff ____________________
Clinical Rotation ______________________ Days absent _____________________

Procedure performed (list by type, instrument, and/or location)
_______________________________________________________________________________
_______________________________________________________________________________

RATING BY NUMBER:
4 = EXCELLENT  3 = GOOD   2 = AVERAGE   1 = POOR  0 = DEFICIENT  (N/A) = UNABLE TO RATE
See reverse for considerations to be taken in rating student technologists

TO BE COMPLETED BY THE SUPERVISING FACULTY/STAFF

<table>
<thead>
<tr>
<th>SKILL AREA</th>
<th>RATING</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demeanor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient Rapport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Proficiency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff Rapport</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional Comments
_______________________________________________________________________________
_______________________________________________________________________________
_______________________________________________________________________________

Signature __________________________________________________________

92
FACTORs FOR CONSIDERATION

Initiative - Does the student
1. Determine goal of study prior to its performance?
2. Prepare camera for acquisition ahead of time?
3. Clean and supply work area?
4. Take initiative in performing imaging procedures?
5. Check images with M.D. without prompting?
6. Possess genuine interest in maintaining work flow?
7. Attempt difficult or unfamiliar procedures with help rather than refuse to try?
8. Experiment with new techniques when time permits?

Professional Demeanor - Does the student
1. Exhibit ethical, mature, and professional conduct?
2. Adhere to departmental policies (i.e., dress code, fire and emergency, radiation safety, misadministration, etc.)?
3. Respectfully address physicians, administrators and other superiors?
4. Refrain from speaking in derogatory terms of patients, M.D.'s, fellow students, or technologists?
5. Focus their conversations on the patient?

Attitude - Does the student
1. Take responsibility for their education?
2. Demonstrate patience and maturity when working with difficult patients?
3. Follow through on written or verbal orders?
4. Possess a pleasant disposition?
5. Gracefully accept suggestions from superiors and fellow students?
6. Arrive punctually to rotation?
7. Take only allotted time for lunch?

Interest - Does the student
1. Stay late or come in early when situation warrants it?
2. Find out additional background information when warranted?
3. Willingly help out on projects or anything else that needs to be done?
4. Have good attendance while on rotation (excluding personal time or reasonable use of sick time)?
5. Remain accountable to assigned rotation/technologist?
6. Express curiosity or ask questions?

Patient Rapport - Does the student
1. Introduce self to patient?
2. Correlate patient's identification with requisition?
3. Explain exam clearly to patient on terms that patient understands?
4. Tactfully determine that female patients of child bearing years are neither pregnant nor nursing prior to administering activity?
5. Anticipate patient's needs and assists them as necessary?
6. Insure patient's privacy and modesty?
7. Use safety devices (i.e., side rails, brakes, restraints, etc.) appropriately and correctly?
8. Frequently inquire into patient's comfort?
9. Adequately reassure nervous patients?
10. Position comatose and immobile patients as gently as alert patients?
11. Show patience toward combative, uncooperative and/or incoherent patients?

Technical Proficiency - Does the student
1. Readily learn new procedures?
2. Easily relearn or correct techniques that they have learned incorrectly?
3. Readily repeat views when quality is in doubt?
4. Make an effort to get the highest quality images within the available time constraints?
5. Apply classroom information to their working environment?
6. Demonstrate self confidence in their ability?
7. Adjust procedures to the individual patient and their needs?
8. Continuously strive to produce high quality work?

Technical Knowledge - Does the student
1. Always wears gloves, lab coats, and film badges when handling radioactive material?
2. Apply concepts of time, distance, and shielding to reduce radiation exposure?
3. Correctly set up and peaks camera?
4. Correctly set up and play back computer acquisitions?
5. Know procedures, radiopharmaceuticals, and activity ranges?
6. Label films properly?
7. Know contraindications for studies?
8. Know order of sequential studies?
9. Correct their own mistakes?

Staff Rapport - Does the student
1. Assist assigned technologist without prompting?
2. Attentively listen to technologist's explanation of procedures?
3. Anticipate equipment/computer/camera needs and handles the situation without prompting?
4. Communicate effectively with technologists and physicians and is able to answer their questions or perform their instructions?
# Student Evaluation of Clinical Site

Student Name _________________________  Date ____________
Clinical Site ________________________
Dates from ________________ to ________________

Circle the answer that best describes your feelings for the following questions.

<table>
<thead>
<tr>
<th>Was this site</th>
<th>Too Slow</th>
<th>Just Right</th>
<th>Too Busy?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments</td>
<td>____________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>____________________________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Were the technologists helpful?       Yes       No
Comments ____________________________

<table>
<thead>
<tr>
<th>Were the physicians helpful?</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments</td>
<td>____________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>____________________________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Was the technologist-student relationship
Excellent  Average  Poor
Comments ____________________________

<table>
<thead>
<tr>
<th>Would you recommend this site again?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments</td>
<td>____________________________</td>
<td></td>
</tr>
<tr>
<td></td>
<td>____________________________</td>
<td></td>
</tr>
</tbody>
</table>
Student Contract
Advanced Medical Imaging Technology Program

I have read the Advanced Medical Imaging Technology Student Handbook, the University of Cincinnati Student Code of Conduct, and the professional codes of conduct and ethics. I agree to the rules, regulations and standards set forth by the Advanced Medical Imaging Technology Program, the College of Allied Health Sciences, and the University of Cincinnati. I understand that failure to comply with Program, College, and University rules and regulations have a negative consequence and may include my expulsion from the program. Furthermore, I understand that failure to comply with professional codes of conduct and ethics may render me ineligible for nationally administered board examinations.

I understand that I must read and understand this document, the University of Cincinnati Student Code of Conduct, and the professional codes of conduct and ethics before I will be allowed to participate in my clinical education. Faculty will answer questions I have regarding their content.

Furthermore, I agree to be timely for class and clinical rotations, will do what is asked of me to the best of my abilities, and I will take charge of both my clinical and classroom education. This includes but is not limited to making sure correct grades are submitted for each course, courses needed for graduation are completed with the grades submitted to the Registrar’s Office, and proper paperwork is submitted in a timely manner.

I will prepare myself to the best of my abilities for the nationally administered board examinations of the modalities I have chosen/been assigned. I will complete all tasks necessary to obtain board eligibility in each modality I pursue.

I agree to abide by the AMIT Program’s Integrity Policy. While the following list is not comprehensive, certain behaviors are unacceptable and it is important that it is clear that the following activities may result in one’s immediate dismissal from the program. You need to place your initials indicating you have read and understand each individual statement.

____ Obtaining answers/solutions on journals, homework, clinical competencies, quizzes, exams or other assignments from other students.

____ Bullying, coercing, or demanding other students’ assistance on assignments.

____ Beginning quizzes or examinations at any time other than the time one is supposed to begin the assignment.

____ Using notes, PowerPoints, classmates or other sources of information to complete a test, quiz, or assignment unless it is permitted to do so.

____ Manufacturing, distribution, selling, using, offering for sale, possessing, buying or attempting to buy any illegal drugs or narcotics.
____ Attending class or clinical rotations while under the influence of alcohol, illegal drugs, or narcotics. Legally prescribed drugs are acceptable when used in the manner prescribed by a licensed physician and the effects of the drugs do not impair the students’ judgment or physical activities.

____ Failure to comply with a university or affiliate official, security personnel, or law enforcement officer acting in the performance of their duty.

____ Intentionally harming, threatening to harm, or intimidating university or affiliate personnel or fellow classmates.

____ Intentionally harming, threatening to harm, or intimidating patients, their families or guests or fellow classmates.

____ Theft.

____ Failure to show up in a timely and consistent manner for clinical rotations. No more than three late arrivals per semester are acceptable.

____ Leaving a clinical rotation early without permission.

____ Failing to comply with the rules, policies, and/or regulations of clinical affiliates.

____ Fighting or quarreling with university or affiliate personnel, patients, or their families or guests.

____ Committing a crime (felony or misdemeanor) while on university or affiliate property. Committing a felony or misdemeanor at any location may result in the student permanently losing eligibility for board examination.

____ Failing to maintain at least a 3.0 grade point average in the program.

____ Receiving any grade lower than a “C” in any professional curriculum course.

____ Either intentionally or unintentionally causing harm to occur to a patient, patient’s guests, or fellow health care worker either through action, negligence, or omission of action.

____ Falsifying or altering University, College, Program, and/or Affiliate documents (i.e., time sheets/cards, clinical competency forms, and evaluations).

____ Plagiarism.

____ Maintain confidentiality of patient, classmate and university/clinical site personnel information (e.g., no gossip) and abide by all HIPAA regulations.
In return for my compliance to the rules and regulations set forth in this document, I understand that the faculty and staff of the Advanced Medical Imaging Technology Program will provide the training and education necessary to prepare oneself for the nationally administered board examinations.

My initials above and signature below affirms my complete understanding of this document and I agree to abide by the rules as set forth by this program.

______________________________  _______________________
Signature                             Date

______________________________
Print Name