NUCLEAR MEDICINE

TECHNOLOGY PROGRAM

STUDENT HANDBOOK
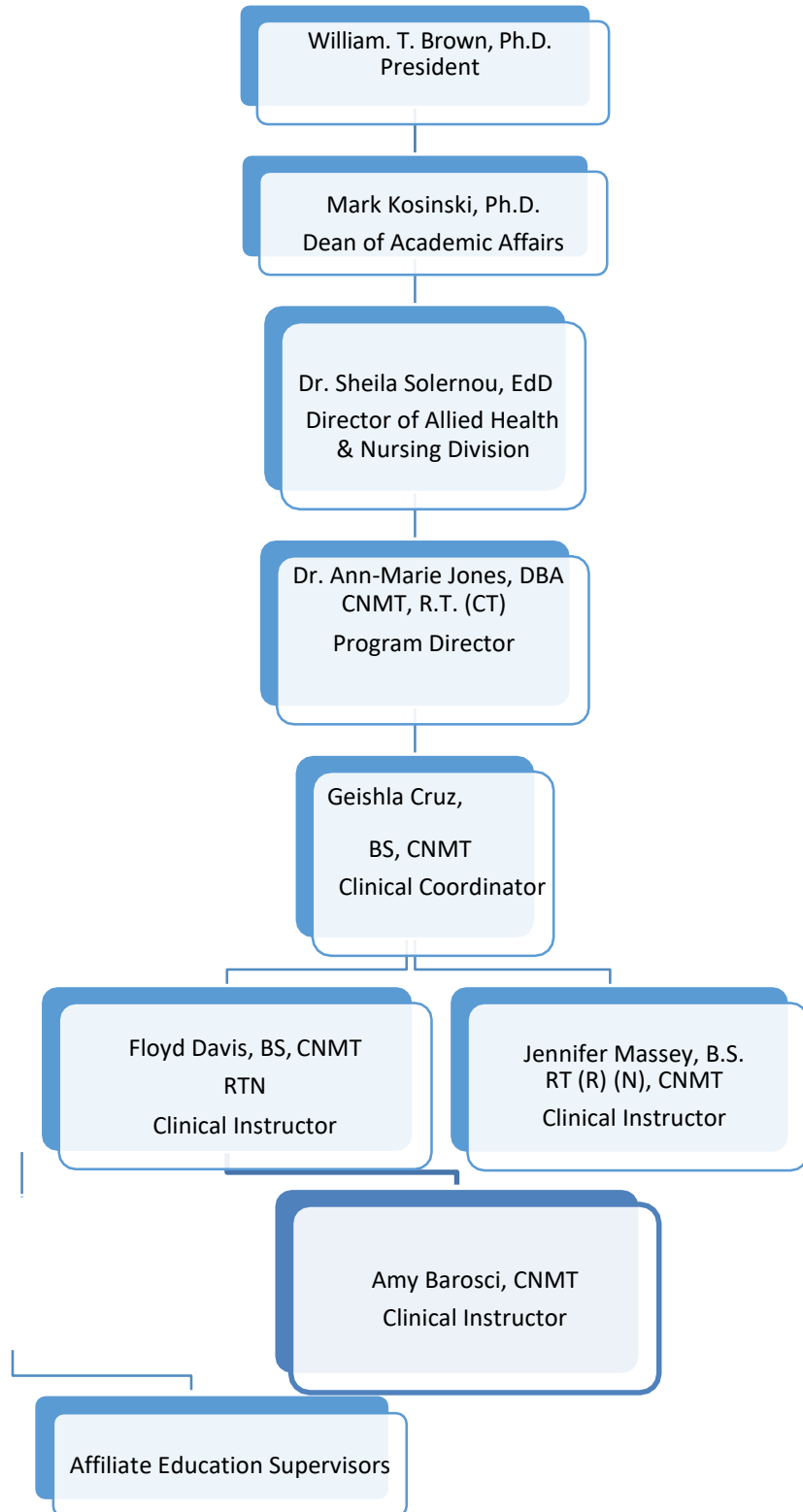

Allied Health and Nursing Division
2020-2021

NMT PROGRAM ACADEMIC CALENDAR 2020-2021*

Summer 2020	
June 4	Accepted Student Day
June 6-31	Patient Care Orientation (PCO)
August 3 – August 5	Success Strategies Workshops
Fall 2020	
August 26	First Day of Regular Semester – Classes Begin
September 2	Last Day to Add Classes
September 5 – 7	Labor Day Recess **(College Closed)**
October 14	Mid-Term Deficiency Reports Due from Faculty
October 28	Last Day to Make up Incomplete Grades from Spring 2020
November 4	Last Day to Withdraw
November 26 – 29	Thanksgiving Recess **(COLLEGE CLOSED/NO CLASSES)**
December 9-14	Final Examinations, **No Clinical**
December 14-18	Clinical M-F 40 hours/* week
December 18	Last Day to Submit Final Grades
December 23	Semester Ends
Winter Intersession	
December 28, 2020*	Winter Clinical Internship M-F 40 hours/week
January 1	New Year's Day, **College Closed**, **No Clinical**
January 15, 2021*	Winter Clinical Internship M-F 40 hours/week
Spring 2021	
January 22	First Day of Classes/Clinical
January 29	Last Day to Add Classes
February 12-15	President's Day Recess (College Closed), College **Closed**
March 12	Mid-Term Deficiency Reports Due from Faculty
March 15-20	Spring Recess, **No Classes or Clinical**
March 26	Last Day to Make Up Incomplete Grades from Fall 2017
April 2	Last Day to Withdraw from Individual Classes
April 6	Last Day to Withdraw from Individual Classes
May 10	Last Day of Classes/Clinical
May 11-17	Final Examinations, **No Clinical**
May 20	Last Day to Submit Final Grades (By 12:00 Noon)
May TBD	Graduation
Summer Clinical Internship	
May 24*	Clinical Internship II Begins M-F, 40 hours/week
May 31	Memorial Day (College Closed), **No Clinical**
July 30*	Last Day of Clinical Internship II

*Due to COVID-19, dates are subject to change in order to meet required program objectives

ORGANIZATIONAL CHART

William. T. Brown, Ph.D.
President

Mark Kosinski, Ph.D.
Dean of Academic Affairs

Dr. Sheila Solernou, EdD
Director of Allied Health
& Nursing Division

Dr. Ann-Marie Jones, DBA
CNMT, R.T. (CT)
Program Director

Geishla Cruz,
BS, CNMT
Clinical Coordinator

Floyd Davis, BS, CNMT
RTN
Clinical Instructor

Jennifer Massey, B.S.
RT (R) (N), CNMT
Clinical Instructor

Amy Barosci, CNMT
Clinical Instructor

Affiliate Education Supervisors

Contents

Nuclear Medicine Technology Program Student Handbook 2020-2021

Nuclear Medicine Technology (NMT) students are responsible for reading and complying with the information which appears in the current GCC Catalog, GCC Student Handbook, the Nuclear Medicine Technology Program Student Handbook, the Affiliates' code of conduct and department policies, and the Code of Ethics of the pertinent professional organizations (ARRT, NMTCB, ASRT, SNMMI- TS). This handbook intends to ensure patient safety and professional, ethical, and legal conduct of all nuclear medicine technology students. Failure to comply with College and Nuclear Medicine Technology Program policies will lead to a review of student behavior and possible disciplinary action, including dismissal from the NMT Program.
The NMT Program reserves the right to modify any statement in the handbook. Changes will be given to students through a NMT Student Handbook Addendum.

Nuclear Medicine Technology Program Student Handbook Acknowledgement of Receipt and Agreement to   Comply

I,_____, acknowledge receiving and reading the 2020-2021 Gateway Community College Nuclear Medicine Technology Program Student Handbook (a supplement to the GCC Student Handbook). I have read the standards and procedures of the NMT Program. I also have read the clinical objectives and evaluation process that will be used to assess my clinical training and clinical competency.
I acknowledge that before signing I have been provided the opportunity to seek further clarification.
I understand that this statement will be placed in my Nuclear Medicine Technology program student record.
Student Name (Printed): _____

Banner ID Number: _____ Signature: _____Date: _____

CONFIDENTIALITY AGREEMENT AND CONSENT TO VIDEO RECORD

During your participation in simulated clinical experience scenarios (SCES) a student in the Gateway Community College (GCC) Nuclear Medicine Technology (NMT) Program is encouraged to participate as an active contributor and as an observer.

The primary objectives of the SCES are to support and enhance your clinical learning while you are a student in the NMT Program. These experiences will provide you with additional methods to identify scanning areas to improve on and how to enhance your scanning skills. SCES are designed to challenge your response and judgment in a variety of clinical situations. Due to the possible sensitive nature of any SCES, strict confidentiality regarding the specific scenarios, including what occurred during the simulation experience, is required by all participants and observers. Strict confidentiality will also help to ensure that the simulation experiences are beneficial for all learners. Simulation scenarios will be discussed during debriefing with the understanding that, "All that takes place in the simulation environment stays in the simulation environment!"

Each student is asked to agree to the following conditions:

My signature on the NMT Program Confidentiality Agreement and Consent to Video Record Acknowledgement of Receipt and Agreement to Comply indicates my agreement to maintain strict confidentiality regarding the specific simulation scenarios, participants, my performance, and the performance of others regardless of whether the information was obtained by participating in the SCES in person, viewing it on a video, or obtaining the knowledge in any other form of communication regarding the SCES. In addition, my signature indicates that I have authorized the GCC NMT faculty and staff to video record my performance during SCES as a participant or as an observer. Furthermore, my signature indicates that I have authorized the GCC NMT faculty and staff to use the video recording(s) of my participation in SCES for purposes including, but not limited to, debriefing, faculty review, and educational support of other learners.

Each student is asked to agree to the following conditions:

My signature on the Nuclear Medicine Technology Program Student Handbook Acknowledgement of Receipt and Agreement to Comply indicates my agreement to maintain strict confidentiality about the details of any SCES, its participant(s), and the performance of any participant(s). In addition, my signature indicates that I have authorized the GCC-NMT faculty and staff to video record my performance during SCES as a participant or as an observer. Furthermore, my signature indicates that I have authorized the GCC-NMT faculty and staff to use the video recording(s) of my participation in SCES for purposes including, but not limited to: debriefing me, faculty review and the educational support of other learners by displaying the recording.

By signing the Nuclear Medicine Technology Program Student Handbook Acknowledgement of Receipt and Agreement to Comply, I acknowledge that my agreement is truly voluntary and that I have been provided the opportunity to seek further clarification of this document prior to signing.

Technology Requirements, Social Media, Personal Electronic Devices, and Recordings

Selected portions of the Nuclear Medicine curriculum are taught, reinforced, or reviewed using educational software, instructional media, publisher resources, computer programs, or audio/video recordings, as examples. Students are required to adhere to all copyright policies when using these resources. Students acknowledge agreement with the *Confidentiality Agreement and Consent to Video Record* through their signature on the *Nuclear Medicine Student Handbook Acknowledgement of Receipt and Agreement to Comply.*

Learning experiences can be on-ground/in-person or online/virtual. Students are required to have access to the necessary technology (i.e. computer, webcam, etc.) to enable participation in all learning activities whether on-ground/in-person or online/virtual. In addition, Students should refer to college course syllabi for more specific requirements or information.

Use of electronic devices for making calls or text messaging is not permitted in the clinical area, college laboratory, or classroom. Some clinical sites do not allow personal electronic devices on the premises; students must abide by the policies of the clinical sites. If use is permitted for academic purposes, devices must be set to silence mode. Disrupting other students, faculty or staff with the use of electronic devices will subject the student to disciplinary action.

Nuclear Medicine students are reminded that posts to any social networking or social media (i.e. Facebook, Twitter, blogs, Snapchat) must reflect the same behavioral standards of honesty, respect, consideration, and professionalism that are expected in academic and clinical environments. In any social media posts or communications, students must adhere to the same restrictions related to privacy for fellow students, faculty, and clients/patients as they do in classroom, laboratory, or clinical environments in accordance with the federal *Health Insurance Portability and Accountability Act (HIPAA).* Information related to clinical experiences must NOT be posted on any social media. Inappropriate use of social media by students is subject to disciplinary action up to and including dismissal from the program.

STUDENT STATEMENT OF RESPONSIBILITY- ACADEMIC ADJUSTMENT

Any student who feels s/he may need an adjustment based on the impact of a documented disability should contact Student Accessibility Services at 203-285-2231 in room S-202 (2nd floor of the South Building) to coordinate reasonable adjustments. Students then should contact the professor privately to ensure adjustments are received.

Students with a documented disability must self-disclose and provide appropriate documentation to an Accessibility Specialist. A request should be made every semester if the student requires reasonable adjustments. Please contact Student Accessibility Services prior to the beginning of the semester or as early as possible in the semester as any potential adjustments that may be made are not retroactive.

For more information contact Accessibility Specialists Ronald Chomicz or Samantha Kusiak at 203-285-2231, rchomicz@gatewayct.edu, or skusiak@gatwayct.edu.

Please see the GCC Policy regarding academic adjustments at http://www.gatewayct.edu/Offices-Departments/Student-Accessibility- Services/Requesting-Academic-Adjustments

My signature below signifies that I have received written directions on the procedure for requesting academic adjustments (including when the request must be made and who I can contact to make the request).

_____

Student Name (Please Print)

_____   _____

Student Signature   Date

PROGRAM INFORMATION

INTRODUCTION

The Gateway Community College Nuclear Medicine Technology Program Student Handbook contains the program specific guidelines and procedures in effect for the 2020-2021 academic year. It is the student's responsibility to be familiar with the Nuclear Medicine Technology Program Student Handbook. <u>The student will be held accountable for meeting the expectations outlined in the Nuclear Medicine Technology Program Student Handbook, College Catalog, College Student Handbook</u> (on the College website at www.gatewayct.edu), the Affiliates' code of conduct and department policies, and the Code of Ethics of the pertinent professional organizations (ARRT, NMTCB, ASRT, SNMMI-TS).

Student behavior with College and Clinical Affiliate faculty and staff, peers, technologists, physicians, patients, and members of the public must be courteous and appropriate for a professional in training. Students are expected to conduct themselves in a positive manner compatible with their desired profession and in accordance with the ASRT, SNMMI-TS, ARRT, and NMTCB Codes of Ethics.

The College or Program reserves the right to modify any statement contained herein. Students are responsible for compliance with all regulations contained in this Student Handbook and the dates cited in the official program academic calendar. Officially approved changes will be disseminated through the Student Handbook Supplement.

This Handbook is not intended to cover all topics and circumstances. We reserve the right to respond to specific situations in a manner that we believe best suits the needs of the program and the student(s) involved, and most closely follow our stated standards.

STATEMENT OF NON-DISCRIMINATION

The Nuclear Medicine Technology Program follows the non-discrimination statement of Gateway Community College which can be found in the Gateway Community College Student Handbook.

NUCLEAR MEDICINE TECHNOLOGY: ASSOCIATE OF SCIENCE DEGREE & CERTIFICATE PROGRAMS

This curriculum (see Appendix A) is designed to prepare students for employment as nuclear medicine technologists in hospitals, private offices and imaging centers. Upon completion of the program, the student will be eligible to apply for application to the certifying board examination administered by the American Registry of Radiologic Technology (ARRT-Nuclear Medicine) and /or Nuclear Medicine Technology Certification Board (NMTCB).

The Program is based on twenty-two months of full-time study. The structure of the curriculum is designed to include didactic and supervised clinical education to assure sufficient opportunity to achieve all didactic and clinical requirements. Students are assigned on a rotating basis to the clinical education centers. Required Program orientation begins in June. Total Clinical Practicum I, II, III, IV, and Clinical Internships I, II, and III, hours are approximately 1,800 total.

NUCLEAR MEDICINE PROGRAM MISSION STATEMENT, PHILOSOPHY, & OUTCOMES

The mission of the Gateway Community College Nuclear Medicine Technology program is to offer high-quality instruction to a diverse population of students in an environment conducive to learning. We respond to the changing academic, occupational, technological, and cultural needs of both students and the community by strengthening our graduates through the inclusion of advanced technology, unique clinical internship experience, and quality patientcare.

PROGRAM PHILOSOPHY

Learning is an active process where the faculty engages the students to apply physical and cognitive abilities to meet and surpass academic and clinical requirements of a nuclear medicine program. Faculty, clinical staff, and students work together to nurture an environment that fosters mutual and respectful learning and sharing of information. The practical application of the theory of nuclear medicine facilitated during labs and the clinical environment, assist the students in moving from the didactic process to the clinical arena. We provide opportunities for students to excel through timely and ongoing academic and clinical evaluations. Most important, we believe that Nuclear Medicine Technologists contribute to social change by working closely with the radiologist and various members of the healthcare team to promote patients' satisfaction and the general health of our community.

Nuclear Medicine Program Goals and Student Learning Outcomes:

1. Students will demonstrate skills in effective oral and written communication
   1.1   Students will demonstrate oral communication skills
   1.2   Students will demonstrate written communication skills

2. Students will demonstrate skills in critical thinking and problem solving in the principles and practices of Nuclear Medicine
   2.1 Students will assess patient requisitions in order to perform proper imaging procedures
   2.2. Students will use critical thinking to overcome clinical challenges

3. Students will demonstrate clinical competence in the practice of Nuclear Medicine
   3.1 Students will apply *As Low as Reasonably Achievable* (ALARA) principles and practices of radiation protection
   3.2 Students will provide appropriate patient care

PROGRAM ACCREDITATION

The Nuclear Medicine Technology Program at Gateway Community College is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT), 820 W Danforth Rd, #B1 Edmond, OK 73003; web address: www.jrcnmt.org. In order to maintain this accreditation, the program must strictly follow the Accreditation Standards for Nuclear Medicine Technologist Education which is published by the JRCNMT. You will find these standards by copying and pasting the following link into your browser: https://www.jrcnmt.org/program-resources/standards-manuals/

NUCLER MEDICINE TECHNOLOGY SCOPE OF PRACTICE AND PERFORMANCE STANDARDS

Nuclear medicine is a medical technology that utilizes sealed and unsealed radioactive materials for diagnostic, treatment, and research purposes. Nuclear medicine instrumentation may be combined with, computed tomography (CT), or other modalities to generate attenuation correction and produce three-dimensional images with or without contrast (adjunctive medications) to enhance the evaluation of physiological processes at a molecular level.

Under the direction of an authorized user, the nuclear medicine technologist is responsible for the safe use of ionizing and nonionizing radiation to for diagnostic, therapeutic, and research purposes. The technologist will review the patient's medical history to understand the patient's illness and pending diagnostic or treatment procedure; instruct the patient before, during, and following the procedure; evaluate the satisfactory preparation of the patient before beginning a procedure; and recognize emergency patient conditions and initiate lifesaving first aid when appropriate.

Administrative functions may include supervising other technologists, students, and other personnel; participating in procuring supplies and equipment; documenting laboratory operations; participating in radiation safety protocols and taking an active role in radiation reduction programs; participating in departmental inspections conducted by various licensing, regulatory, and accrediting agencies; participating in departmental quality assurance or quality improvement projects; and participating in scheduling patient procedures.

A certified nuclear medicine technologist is qualified to perform general nuclear medicine procedures, nuclear medicine therapy, nuclear cardiology procedures, and positron emission tomography (PET) procedures at entry level. The certified nuclear medicine technologist is an individual who is registered or certified by the Nuclear Medicine Technology Certification Board (NMTCB) or the American Registry of Radiologic Technologists (ARRT) in nuclear medicine technology or is a registered technologist with the Canadian Association of Medical Radiation Technologists (CAMRT).

Education:

Nuclear Medicine Technologists may complete a one- or two- year certificate program, a two-year associate's degree, or a four-year bachelor's degree. Didactic courses include but are not limited to the physical sciences, biological effects of radiation exposure, radiation protection and procedures, the use of radiopharmaceuticals and adjunct pharmaceuticals, imaging techniques, and computer applications. A structured clinical education component provides experience in the clinical environment. Clinical education is designed to meet the requirements of the certification exams. Graduates of accredited programs are eligible to sit for certification

examinations offered by the NMTCB and ARRT.

The Joint Review Committee on Education Programs in Nuclear Medicine Technology accredits training programs in nuclear medicine technology.

Licensure

Requirements for licensure of all imaging technologists vary from state to state, so it is important that technologists check the requirements of the state in which they plan to work.

Certification

Certification is available from the NMTCB and the ARRT.

Continuing Education

In addition to the general certification requirements, certified technologists also must complete a certain number of continuing education hours to maintain certification. Continuing education is required primarily because of the frequent technological and radiopharmaceutical innovations.

The scope of practice in nuclear medicine technology includes, but is not limited to, the following areas and responsibilities:

Patient Care: Requires the exercise of judgment to assess and respond to the patient's needs before, during, and after diagnostic imaging and treatment procedures and in patient medication reconciliation. This includes record keeping in accordance with the Health Insurance Portability and Accountability Act (HIPAA).

Instrumentation/Quality Control:

Involves the operation of:

Nuclear medicine and PET imaging systems:
With or without sealed sources of radioactive materials, x-ray tubes, or MR systems for attenuation correction, transmission imaging, or diagnostic CT or MR (when appropriately trained and/or credentialed).

Non-imaging instrumentation:
- Dose calibrators
- Survey instrumentation for exposure and contamination
- Probe and well instrumentation
- Ancillary patient care equipment as authorized by institutional policies
- Infusion systems
- Radionuclide generators

Quality control:
The evaluation and maintenance of a quality control program for all instrumentation to ensure optimal performance and stability.

Diagnostic Procedures: Requires the utilization of appropriate techniques, radiopharmaceuticals, and adjunctive medications as part of a standard protocol to ensure quality diagnostic images and/or laboratory results. Obtains biological samples to perform testing as required for the optimization of patient care and quality of diagnostic procedures.

Therapeutic Procedures: Requires the utilization of appropriate techniques, radiopharmaceuticals, and adjunctive medications as part of a standard protocol to ensure proper treatment of the disease process. Obtains biological samples to perform testing as required for the optimization of patient care.

Adjunctive Medications: Involves the identification, preparation, calculation, documentation, administration, and monitoring of adjunctive medication(s) used during diagnostic imaging, or therapeutic procedure. Adjunctive medications are defined as those medications used to evoke a specific physiological or biochemical response. Also included are the preparation and administration of oral and IV contrast used in the performance of imaging studies

Radiopharmaceuticals: Involves the safe handling and storage of radiopharmaceuticals. This includes, but is not limited to, the procurement, identification, dose calculation, and administration of radiopharmaceuticals. It also includes all associated documentation and disposal as appropriate.

Radiation Safety: Involves practicing techniques that will minimize radiation exposure to the patient, health care personnel, and general public, through consistently using protective devices, shields, dose reduction, and monitors consistent with ALARA principles and establishing Protocols for managing spills and unplanned releases of radiation.

CONTACT PERSONS AND TELEPHONE NUMBERS

Gateway Community College	**Telephone**	**Cell Phone**
Dr. Sheila Solernou, Allied Health & Nursing Division Director	(203) 285-2393	
Dr. AnnMarie Jones, Program Director, Nuclear Medicine	(203) 285-2381	(203) 752-8427
Geishla Cruz, Clinical Coordinator	(203) 285-2386	(203) 980-3086

Clinical Affiliate Sites

Yale-New Haven Hospital:
- Matthew Gregory, Affiliate Education Supervisor- Nuc. Med General/PET
  (203) 200-5119

- Vera Tsatkin, Affiliate Education Supervisor- Nuc. Cardiology
  (203) 688-3571 or

(203) 688-4134

Yale-New Haven Hospital, Saint Raphael Campus:
- Jamie Sheehan, Affiliate Education Supervisor
- (203) 789-3134 or
  (203) 789-5110
- PET (203) 789-6096

Yale University PET Center
(203) 785-7172
- Elisa Hidalgo, Affiliate Education Supervisor

VA Connecticut Healthcare System, West Haven Campus:
- Lori Daley, Affiliate Education Supervisor
  (203) 932-5711 Ext. 3267 or 4684

Middlesex Hospital:
- Carissa Carta, Affiliate Education Supervisor
- Nuclear Medicine (Hospital)
  (860) 344-6207
- Outpatient Facility
  (860) 358-2502

Griffin Hospital:
- Regina Sheehan, Affiliate Education Supervisor
  (203) 732-7271

Cardinal Health Nuclear Pharmacy Services, East Hartford:
- Karen Hoang, Affiliate Education Supervisor
  (860) 291-9027

Griffin Hospital:
- Regina Sheehan, Affiliate Education Supervisor
  (203) 732-7271

Midstate Medical Center:
- Thaibinh Dang, Affiliate Education Supervisor
  (203) 694-8636 (Department) (203) 694-8405

THE HOSPITAL of CENTRAL CONNECTICUT

- Erik Lyons, Affiliate Education Supervisor

  (860) 224 – 5900 ext 4749

  (860) 224 – 5900 ext 2533 department

William W. Backus Hospital:
- Tasnuba Hoque, Affiliate Education Supervisor
  (860) 889-8331 x 4249 or 4244

Yale New Haven Health, Bridgeport Hospital, YNHH (Bridgeport Hospital/Milford Campus)Campus
- Amy Barocsi, Affiliate Education Supervisor
  (203) 876-4248

Lawrence and Memorial Hospital:
- Kimberly Roche, Affiliate Education Supervisor
(860) 444-5197

UCONN Health Center:
- James Forcade, Affiliate Education Supervisor
(860) 679-3120

Waterbury Hospital

- Steven Turner, Affiliate Education Supervisor

  (203) 575 - 5249

> ➢ Students are not allowed to contact any College or affiliate faculty or staff members via their home/personal phones or emails.

> ➢ Students in the Nuclear Medicine Technology Program are expected to rotate through all/any clinical education affiliates. Students are responsible for transportation and parking expenses

PROGRAM STANDARDS

STUDENT CONDUCT
Nuclear Medicine Technology students are entering a profession that requires academic honesty and integrity. The discipline of nuclear medicine requires assumption of personal responsibility and ethical behavior in all settings, in keeping with the American Society of Radiologic Technologists (ASRT) Code of Ethics (see Appendix C) and the Society of Nuclear Medicine & Molecular Imaging, Technologists Section Code of Ethics (see Appendix B). Students are expected to abide by these standards of professional behavior and clinical practice at all times. Any student found to be in violation of these standards may be dismissed
from the Nuclear Medicine Technology Program. Any violation of conduct will be dealt with according to the standards and practices outlined in this Nuclear Medicine Student Handbook, the College Student Handbook located on the College website (www.gatewayct.edu), the Board of Regents (BOR) for Higher Education/ Connecticut State Colleges and Universities (CSCU) Student Code of Conduct at http://www.ct.edu/files/pdfs/nursing-student-code-of-conduct.pdf, any additional policies approved by the Board of Regents for Higher Education governing student code, each affiliates' code of conduct and department policies.
Nuclear Medicine Technology Program students are guests of the Clinical Affiliates. As guests, students are required to adhere to the Clinical Affiliates' policies as if they were employees of the Clinical Affiliates. Behavior that interferes with the operations of the College, Program or Clinical Affiliate, violates established policies and/or procedures, discredits the Program or is offensive to patients, visitors, Program staff, clinical staff or fellow students will not be tolerated. Appropriate action will be taken when a violation occurs and may include dismissal from the Program.
The use of cell phones/smartphones or electronic devices for making calls or text messaging is not permitted in the clinical area, college laboratory or classroom. The devices must be on silent,

if the student disrupts other students, faculty, or staff with the use of these devices or uses these devices inappropriately, the student may be subject to disciplinary action per college procedures.

Nuclear Medicine Technology students are reminded that posts to any and all social networking or social media (including personal Facebook, Twitter, personal blogs, and other types of social media accounts) must reflect the same behavioral standards of honesty, respect, consideration and professionalism that are expected in college and clinical environments. In any social media posts or communications, students must adhere to the same restrictions related to privacy for fellow students, faculty, and patients as they do in a classroom or clinical environment in accordance with federal Health Insurance Portability and Accountability Act (HIPAA) standards. Inappropriate use of social media by users with regard to the college, its faculty, students, clinical affiliates, or patients is subject to disciplinary actions.

A student's written work is expected to be original and done independently unless otherwise indicated. Footnotes and references must be used to acknowledge the source and avoid plagiarism in accordance with the American Psychological Association (APA) standards. Selected portions of the nuclear medicine technology curriculum are taught, reinforced, or reviewed through the use of educational software/instructional media such as videos, computer programs and /or online learning activities. Students are required to adhere to all copyright policies.

Violations of academic integrity will be dealt with in accordance with College policy.

INCIDENT/FINGER STICK/ACCIDENT REPORTS

Students must report any incident or accident that occurs at the clinical affiliate immediately to the Clinical Instructor and Clinical Coordinator. For finger sticks, students must immediately report the occurrence to a supervisor and follow that particular hospital's policy for accidental needle stick. An incident or accident report for each occurrence must be completed according to the guidelines of the clinical affiliate site. Students must provide a copy of the incident report from the clinical affiliate site to the Clinical Coordinator and the Program Director within 24 hours. Failure to report an occurrence to the Clinical Instructor, Clinical Coordinator, and Program Director will result in a disciplinary sanction. For any incidents or accidents that occur while on the Gateway Community College campus, the student should follow the guidelines outlined in the Gateway Community College student handbook.

PROGRAM CLINICAL DISCIPLINARY STANDARDS

The Program disciplinary standards and procedures may be initiated upon receipt by the Program Director of, but not limited to, the following: written evaluation, verbal report from Affiliate Clinical staff to College faculty/staff/administration, clinical observation by College faculty/staff, written and/or verbal comment from Clinical Affiliate and/or College faculty/staff, daily clinical performance log and/or time card, conference with College and/or Clinical Affiliate faculty/staff. This is not an all-inclusive list. Other mechanisms not listed here may be used to begin disciplinary procedures.

- Upon receipt of the report of a violation by a student, the Program Director will provide the student an opportunity to meet within (3) working days of the violation. The purpose of the meeting is to inform the student of the reported violation and to provide the student an

opportunity to submit information for the Program Director's consideration of whether the student has committed the reported violation.

- The student will be given an opportunity to submit information for the Program Director's consideration within (3) working days.
- The Program Director will review and investigate allegations and render a decision within (5) working days of meeting with the student. During the investigation period, the student may be placed on temporary suspension from the clinical obligations of the Program. The decision of the Program Director as to whether the student committed the reported violation and the appropriate sanction is final.
- If the student is not satisfied with the resolution, the student may bring the concern to the Allied Health/Nursing Division Director within (5) working days. The Allied Health/Nursing Division Director will respond in writing within (5) working days of the receipt of the appeal.
- If the student is not satisfied with the decision of the Allied Health/Nursing Division Director, the student can initiate the college student grievance procedure as outlined in the College Student Handbook.

Student behavior, physical or emotional condition in the clinical teaching/learning setting that is a conflict with the expectations for Student Conduct will be managed in accordance with the judgment of teaching faculty present. In consultation with the Nuclear Medicine Technology Program Director or Clinical Coordinator, faculty may determine that the expertise of additional college personnel, healthcare professional or administrators is needed to establish direction appropriate to an individual situation.

If the physical or emotional condition of the student is disability related and an Academic Adjustment has been granted by the college Accessibility Services Coordinator and the clinical agency, then faculty must consult with the college Accessibility Services Coordinator prior to making further determination. The actions of faculty are sanctioned based upon the overarching requirement to protect the student(s) and/or client(s), other students, and/or agency employees with whom they carry responsibility for delivering safe and competent nuclear medicine care. The dismissal of a student from the clinical teaching and learning environment for unsafe nuclear medicine practice beyond one day (interim suspension) is made by the Nuclear Medicine Program Director and Clinical Coordinator. If interim suspension from clinical is a consideration, the student is provided an opportunity to meet with designated college personnel to provide pertinent information for consideration prior to any decision. The dismissal of a student from any course teaching/learning activities other than clinical beyond one day (interim suspension) must be made in collaboration with designated Nuclear Medicine Technology Program Director and the Dean of Student Services for the College. If interim suspension from any course teaching/learning activities other than clinical is a consideration, the student is provided an opportunity to meet with designated college personnel to provide pertinent information. The information provided by the student is considered by the designated college personnel in collaboration with the Dean of Student Services prior to any decision addressing interim suspension from course teaching/learning activities other than clinical.

DISCIPLINARY SANCTIONS

Disciplinary sanctions that may be imposed upon a finding that a violation of the Program rules of student behavior has occurred include but are not limited to, the following:

1. Documented verbal warning,
2. Disciplinary written warning,
3. Clinical/Academic disciplinary probation

4. Programmatic dismissal.
   Sanctions imposed are based upon the severity of the violation and the prior behavior of the student and are progressive in nature. However, when, in the judgment of the Program Director, the violation by a student or the student's prior record in the Program or at the College warrants, more severe sanctions may be imposed, including dismissal from the Program.
   If a student who is on Clinical Probation receives 2 failing clinical evaluations in a semester/winter or summer intersession, he/she may be immediately dismissed from the Program. In addition, in circumstances, the Director may recommend to the College's Dean of Students that the reported behavior of the student be addressed under the GCC Student Conduct, which may lead to the student's interim suspension or expulsion from the College.

BEHAVIOR THAT ENDANGERS

In such cases where the continued presence of a student constitutes, in the judgment of the Clinical Affiliate, a danger to the health and safety of patients or staff, the Clinical Affiliate may temporarily or permanently remove a student from the patient area and refer the student immediately to the Program Director. Students in the Nuclear Medicine program are expected to rotate through all clinical sites.

The Clinical Affiliate may temporarily or permanently remove a student from their site for inappropriate or unethical behavior, unacceptable performance, impairment, health status or failure to comply with their policies. If the Clinical Affiliate does raise a concern about a student, that communication will go first to the Clinical Coordinator/Program Director.

An investigation by the Program/Division will ensue when a student has been temporarily or permanently removed from the Clinical Affiliate. The student must immediately deliver their film badge and hospital ID to the Clinical Coordinator/Program Director when they are removed from the Clinical Affiliate. The student will not be assigned to another clinical site during the investigation.

A student who is permanently removed from a Clinical Affiliate after the investigation will be dismissed from the Program, and will not be eligible for re-admittance to the program at any time in the future.

Academic Advising/Academic Improvement Guidelines

The Nuclear Medicine Technology Program provides academic advising and/or improvement as is necessary based on student performance outcomes. The procedure for academic advising and/or improvement is as follows:

Academic Advising/Academic Improvement Procedures

The following procedure shall govern the enforcement of the Academic Advising/Academic Improvement Procedures based on the minimum grade requirement of C or higher.
1. The Program Director, or designee, will provide academic advising to the student as needed and at mid-semester. An academic improvement plan will be developed. If, at mid semester, the student's course grade is below the minimum grade requirement, the student will be placed on Academic Probation until the end of the semester and a midterm deficiency will be submitted to the Registrar's office.
2. The Program Director, or designee, will refer the student to the Allied Health and Nursing Advisor or to the course instructor. The student must set up an appointment with the ALH/NUR Advisor or course instructor within (3) working days of initial meeting with Program Director.

3. The Program Director, or designee, will submit a CARE Report through the Counseling and Wellness Center as needed and within (3) days of initial meeting with student.
4. If the student does not meet the minimum grade requirement of 75 or higher in any program course, the student will meet with the Program Director and be dismissed from the Program.
5. If the student is not satisfied with the final semester grade, the student can initiate the College Student Grievance Procedure as outlined in the College Student Handbook.

PROGRESSION STANDARDS

Students must meet all course requirements to progress to the next course. All nuclear medicine courses are sequential and have prerequisite and/or co-requisite course requirements which may include NMT and general education courses. All NMT and co-requisite course requirements must be successfully completed in the prescribed order according to the program of study (see Appendix A). The Program requires a minimum grade of C in all math and science courses. The Program requires a minimum numerical grade of 75% in all program specific courses to continue in the program.

A student whose GPA falls below the minimum requirement (2.0) will be dismissed from the Program. A student must wait at least one semester before applying for readmission. Dismissed students who wish to seek readmission must comply with the NMT Program Readmission Standards and Requirements. In addition, the student will be required to audit Nuclear Medicine courses previously taken and successfully completed during the semester of re-entry. For example, a student who readmits to the first year, spring semester, will register for any Program course not previously completed with the minimum grade requirement AND must register to AUDIT those Program courses previously completed successfully during that semester.

A student who earns an academic failure or withdraws from one or more NMT courses will be eligible for admission/readmission to the Allied Health Program as a new student only once.

To participate in clinical experiences, students must comply with the health requirements, including but not limited to: tuberculin test, influenza vaccine, drug, and background checks. A student who does not have current documentation of immunizations/tests on file or fails a drug or criminal background check will be ineligible to practice at that site and may not be able to complete Program requirements to be eligible for graduation.

NMT faculty are available during office hours and by appointment to provide the academic advisement to the program students. NMT Program students are encouraged to seek counsel for academic, personal or financial issues. Counseling services are available to students through Student Services.

NMT PROGRAM GRADES AND QUALITY POINTS

Number Grade	Letter Grade	Grade Weight
94-100	A	4.0
90-93	A-	3.7
87-89	B+	3.3
84-86	B	3.0
80-83	B-	2.7
77-79	C+	2.3
75-76	C	2.0
70-74	C-	1.7
67-69	D+	1.3
64-66	D	1.0
60-63	D-	0.7
below 60	F	0.0
	I	Incomplete
	W	Withdraw
	Au	Audit
	P	Pass

LEAVE OF ABSENCE

In cases of extenuating circumstances such as extensive illness, hardship or emergency, a student may request a leave of absence from the Program for a period of no more than one year. A request for a leave of absence may only be made after the student has satisfactorily completed the first full, fifteen-week semester of the Nuclear Medicine Program. Request must be submitted in writing to the Program Director. Students who withdraw because of personal or health-related issues and who are in good academic and clinical standing are eligible to re-enroll to the Program and must follow the Program's readmission guidelines which are included in this handbook. Applications for readmission should be accompanied by a healthcare provider's release and a completed health form which states that the student is able to return to class and clinical attendance with no restrictions. If a student needs to withdraw from the Nuclear Medicine Program before the successful completion of the first full, fifteen-week semester, he/she must reapply to the Program as a new student and follow all of the program application requirements including attending an information session within 12 months of applying. Written notification of withdrawal must be submitted to the Program Director and the student must withdraw from all program specific courses immediately and submit a Change of Curriculum form to the Registrar's office.

READMISSION PROCEDURES

Readmission to the Nuclear Medicine Technology Program is based on a review of, but not limited to, past academic and clinical evaluations, and evidence of interim efforts to strengthen areas of weakness. A student is eligible for readmission to the NMT Program once. Consideration for readmission to the program can only be granted if there are available openings, clinical resources and faculty. In the event there are more readmission applicants than available openings, a ranking system will be applied. Readmission requests are evaluated on an individual basis. The Program Director reserves the right to deny readmission to those students who do not complete the requirements of the readmission plan.

READMISSION ELIGIBILITY REQUIREMENTS

All applicants must meet the following criteria in order to be eligible to apply for Readmission:
- All applicants for readmission must have successfully completed the first semester of the NMT Program
- Be in good clinical standing at the time of leaving the Program;
- Minimum GPA of 2.75

Students who withdraw because of personal or health-related problems and who are in good academic and clinical standing are eligible to reapply to the Program the following year. Applications for readmission should be accompanied by a release from the student's healthcare provider and a completed health form which states that the student is able to return to class and clinical attendance with no restrictions. Please note, if a student is granted readmission he/she will be required to repeat any course(s) where the grade did not meet the minimum requirement. In addition, the student will be required to register for an Independent Study, ALH198 – Allied Health Refresher, during the semester they readmit. This Independent Study will cover those NUC MED courses offered during the semester they readmit into but have already previously completed with a C or higher. For example, a student earns a grade of C- in NMT*201 but passes NMT*121 and NMT*112 during the spring 2020 semester. The student must apply for readmission to the Program to be readmitted into the spring 2021 semester.

When the student returns for spring 2021, the student must register for the course they did not pass with a C or higher, in this case NMT*201 and will register for an Independent Study, ALH*198 - Allied Health Refresher, which will require the student to participate in the courses they successfully completed during spring 2020, in this case, NMT*121 and NMT*112.

READMISSION PROCESS

The student must:

Submit a request for readmission form to the Program Director by April 1st for the fall semester, November 1st for the spring semester or January 1st for the summer session. Successfully complete a clinical refresher independent study to maintain their clinical skills. This must be completed during the semester prior to the semester he/she wishes to be considered for readmission. The student will be required to attend eight (8) hours of clinical per week. The clinical rotation schedule will be determined by the Clinical Coordinator. The student must pass a clinical skills evaluation conducted by the Clinical Coordinator and/or Program Director to be eligible for clinical reentry. Submit current health assessment forms as outlined in the readmission plan. Notification will be given to the student prior to the semester they are required to complete the clinical independent study.

INELIGIBILITY FOR READMISSION
A student who fails to follow the readmission process
The student received a final grade of F (Fail) in any NMT clinical practicum or internship course
The student has been readmitted once before
The student has withdrawn or been dismissed from the Nuclear Medicine Program for more than 12 months.

REVIEW OF ACADEMIC STANDING (APPEAL OF GRADE)
Students in the Nuclear Medicine Technology Program must follow the policy as stated in the College Student Handbook, Policy on Student Rights for both didactic and clinical grades.

COMPLETION OF THE NMT PROGRAM AND GRADUATION
The Nuclear Medicine Technology Program is completed on the day of the GCC Commencement Ceremonies. In addition to the College's general requirements for graduation, students of the Nuclear Medicine Technology Program must have completed all math and science courses with a C or better and program specific courses with numerical grade of 75% or better. Students must successfully complete all the required competencies (see Appendix K), including the exit competency (see Appendix N). The students must not owe any clinical time; if the student owes time, he/she must make up the time prior to published graduation date in order to complete the Program and be deemed registry eligible.

All clinical documentation, clinical affiliate ID badges and radiation monitors must be completed and/or turned to Clinical Coordinator before commencement for a student to graduate and be deemed registry eligible.

Students who have not met all program requirements for graduation may not be allowed to participate in the Pinning Ceremony, may not be considered for program awards, nor considered registry eligible.

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STUDENT ATTENDANCE STANDARDS

Didactic Attendance

By enrolling in the College, the students accept responsibility to take full advantage of his/her educational opportunity by regular attendance at classes and laboratories. The College does not require that faculty administer a uniform system of attendance regulations. For purposes of record keeping, all program instructors should keep attendance.

At the beginning of each semester, the instructor will delineate clearly what he/she considers necessary for the successful completion of the course. The student is expected to meet his/her academic obligations or to assume the risks incurred by failure to do so.

School Closings/Inclement Weather

The student should refer to area radio and television stations, GCC School Closing Hotline (203- 285-2049) or the College web site for class delays late openings, cancellations or school closings (see GCC Student Handbook, Section on Cancellation of Classes). All students should be enrolled in the GCC alert system.

School Closings on Clinical Days

In the event that College classes are cancelled, clinical experiences for that date will be cancelled. Students follow the GCC closing/delay schedule for academic and clinical days, and should make a comment in the Time Exception area of the online clinical documentation system accordingly. The clinical affiliate staff members do not have the authority to allow students to be excused from attending clinical due to inclement weather. Students can use their available CTO time if they are concerned about the driving conditions. If the student chooses to use CTO time due to inclement weather, a full 8 hours will be deducted from their CTO bank.

CLINICAL HOURS/ASSIGNMENTS

Students are expected to follow the Clinical Rotation Schedules that are distributed by the Clinical Coordinator. Clinical rotations are designed to ensure an equitable education experience for every student, and are created at the discretion of the Clinical Coordinator and Program Director. Students are expected to attend clinical practicum in 8-hour shifts on scheduled clinical days. Students are required to rotate and travel to any/all of the clinical affiliate sites that are affiliated with the Program. Students are responsible for transportation and parking expenses at these sites.

Students are expected to maintain a routine schedule while at all affiliates. Each student should attend the regular 8:00am-4:30pm shift, and may also rotate to the earlier and/or later shifts of the department to maintain skills in quality control/assurance and radiopharmacy. The shift schedules will be assigned by the AES, and are based on educational objectives. Each student needs to participate in the tasks that occur throughout the working day to meet the educational objectives and outcomes required of the course or rotation. Students cannot alter their time schedule to meet their personal needs on a day-to-day basis.

The following is a summary of the clinical hours depending on the student's clinical assignment: Please note, students are sometimes expected to report to the clinical site as early as 6:00 am to observe or participate in HOT LAB DUTIES.

YNHH Regular Hours   8:00am-4:30pm
- QC/QA (Nuclear Cardiology Only) & Radiopharmacy: the student must check with the technologist assigned to the same rotation (before the rotation begins) regarding the proper time to arrive in the department. The student will leave the clinic 8 hours after their arrival. The clinical rotation schedule will indicate which department (Nuc. Med. or Nuc. Card.) the student is assigned to when attending a Radiopharmacy rotation.

YNHH- St. Raphael Campus Regular Hours   8:00am-4:30pm
- an earlier or later shift may be assigned by supervising technologist

VA Connecticut Healthcare System, West Haven Campus, Nuclear Medicine Department Regular Hours   7:30am-4:00pm
- a later shift may be assigned by supervising technologist. Students may not arrive earlier than 7:30am.

Griffin Hospital Regular Hours   8:00am-4:30pm
- an earlier or later shift may be assigned by supervising technologist

Middlesex Hospital Regular Hours   8:00am-4:30pm
- an earlier or later shift may be assigned by supervising technologist

Cardinal Health Nuclear Pharmacy Services*
- Rotation lengths and shifts will vary; all students will rotate varying day and night shifts (ex.6am-2pm and 12am-8am)
- *the assigned rotation schedule is determined by the supervising Pharmacist and Clinical Coordinator

Midstate Medical Center Regular Hours   7:30am-4:00pm
- an earlier or later shift may be assigned by supervising technologist

Waterbury Hospital Regular Hours   8:00am-4:30pm
- an earlier or later shift may be assigned by supervising technologist

Yale New Haven Health, Bridgeport Hospital, YNHH (Bridgeport Hospital/Milford Campus)
 Regular Hours   8:00am-4:30pm
- an earlier or later shift may be assigned by supervising technologist

William W. Backus Hospital Regular Hours   8:00am-4:30pm
- an earlier or later shift may be assigned by supervising technologist

Lawrence & Memorial Regular Hours   8:00am-4:30pm
- an earlier or later shift may be assigned by supervising technologist

UCONN Health Center Regular Hours   8:00am-4:30pm
- an earlier or later shift may be assigned by supervising technologist

THE HOSPITAL OF CENTRAL CONNECTICUT   8:00am-4:30pm
- an earlier or later shift may be assigned by supervising technologist

CLINICAL ATTENDANCE
1. Students are scheduled for eight (8) hours of clinical practicum per day. Report to your clinical assignment on time and be ready to start when your shift begins.
The student must contact the Clinical Coordinator if he/she is told to leave a clinical assignment (including venipuncture) after being there less than 7 hours.

The Clinical Coordinator will attempt to re-assign the student for the remainder of the day on an individual basis.

2.   The student's daily attendance record is included in the online clinical documentation system, and the hard copies of the time cards are to be kept as additional verification. Students are responsible to keep track of their clinical hours to submit onto an online clinical documentation system.

3.   It is the student's responsibility to clock in and out each day. Students who are assigned to a clinical affiliate that does not allow them to access the Internet must enter their entry and exit times from another computer by the end of each day. Please note that this data will be part of your clinical grade. Failure to clock in/out by the end of each day will result in loss of Clinical Time Off (CTO) hours for the rotation, as well as a failure in clinical attendance for that semester. (see Appendix G for Attendance and Punctuality Evaluation Form for Clinical Practica I-IV and Clinical Internships I-III).

4.   Hours worked must be verified on a weekly basis either by the staff technologist in your assigned area or by the AES in the area; i.e., the AES approves the times in the online clinical documentation system on a weekly basis.

5.   If the student fails to record their time accurately, they will not receive credit for the hours of training and will lose CTO time. It is student responsibility to note the time of arrival and /or departure from clinical site. Any inaccuracies entered in the online clinical documentation system as determined by the Supervising Technologist/Clinical Coordinator, will be considered falsification of documents and will result in immediate dismissal from the Nuclear Medicine Technology Program.

6.   Students are required to fulfill their clinical obligations. Therefore, no one is permitted to leave the clinical site before the shift ends unless the Clinical Coordinator /AES has granted approval. The Clinical Coordinator/AES will approve the times in/out for each day that the student receives permission to leave early. Chronic absenteeism, lateness and leaving early will be dealt with in accordance of the disciplinary policy for the Program.

7.   Lateness is defined as reporting to your assigned area any time later than the scheduled start time or returning late from your scheduled break. Lateness will not be tolerated. Three (3) incidents of lateness will result in a loss of 8 hours CTO.

8.   Students MUST complete their hours in their assigned area. Changes of scheduled clinical sites are not permitted. Any student initiating changes with the clinical site or other students will be removed from the clinical site and the program. Because of the necessity to complete competencies in all areas, this policy will be strictly enforced. The program reserves the right to alter the assignment schedule as needed to insure all students have adequate rotations in all areas. The Clinical Coordinator/Program Director reserves the right to change clinical assignments due to educational and/or staffing concerns.

9.   Students who do not report for clinical duty at the start of their scheduled shifts must notify their Clinical Coordinator and the AES/Technologist assigned to the clinical area within one half hour of the scheduled shift.

CLINICAL TIME OFF (CTO)

- Students may only take CTO time in four (4) or eight (8) hour blocks.
- Students are allotted two (2) CTO days per clinical practicum.
- Students are allotted three (3) CTO days for the summer internship.
- Students are allotted one (1) CTO day during the winter internship.
- CTO days cannot be accrued or carried over from semester to semester.
- CTO cannot be borrowed or donated from/to other students.
- When a student plans to use their CTO hours:
  ➢ they must submit a CTO form (see Appendix H) or send an email to the Clinical Coordinator, 24 hours in advance requesting time off.
  ➢ CTO time must be approved by the Clinical Coordinator and students need to receive confirmation of approval before taking time off.
  ➢ the CTO time must be recorded in the online clinical documentation system. Time entered "0800-1600" and comment documented "1 CTO 8 hours used)
  ➢ student is responsible for informing the AES of scheduled time off that has been approved.
  ➢ students must notify both the AES and the Clinical Coordinator whenever they are late, absent, or leave early.
- An absence of more than two (2) consecutive days requires a physician's note before returning to your clinical site. A student absence without notification for three (3) consecutive days on which the student was scheduled for clinical duty is considered a voluntary resignation from the program without notice.
  - Three (3) incidents of lateness will result in a loss of 8 hours CTO. Continued tardiness will be dealt with in accordance of the disciplinary procedures of the Program.
  - Students who do not notify their clinical AES and the Clinical Coordinator of CTO, tardiness or leaving early, will be dealt with in accordance of the disciplinary procedures of the Program.
  - If a student exceeds the allotted CTO days per practicum/internship, the excess must be made up on the next clinical day off and before the end of the semester. CTO cannot be used the week of mid-terms or the week before finals. Make up time is for the sole purpose of bringing the student back into compliance with Program standards. Time cannot be made up without appropriate authorization from the Clinical Coordinator. The student will receive a failing grade for the attendance portion of the clinical grade for that semester. Students cannot bank or add time to their CTO balance by "making up" hours in advance. Any owed time must be made up before the student will be allowed to graduate or progress to next semester.

CTO days should be reserved for illness and emergencies, not for routine appointments. Students should not schedule appointments during clinical time. If appointments must be scheduled on a clinical day, students are encouraged to schedule them at the beginning or the end of a clinical shift. If the student must come in late or leave early for an appointment, four (4) hours of their CTO time will be deducted, and he/she must follow the procedures for scheduling CTO time.

BEREAVEMENT TIME

It is the procedure of the Allied Health & Nursing Division to grant students reasonable bereavement time off without loss of CTO days when a death occurs in a student's immediate family.

a. Definitions:

Immediate Family- Spouse, parent, step parent, daughter, son, step child, brother, sister, mother- in-law, father-in-law, daughter-in-law, son-in-law, grandparent, grandchild, a person who is legally acting in one of the above capacities, or another blood relative living in the student's residence.

b. Guidelines:

Benefit Provisions- When a death occurs in a student's immediate family, the bereaved student will be granted bereavement time off up to three consecutive days to attend the funeral, to make arrangements relating to the death or as other circumstances require. The Program Director reserves the right to require verification of the death and relationship of the student to the deceased. Additional bereavement time off may be granted per the discretion of the Program Director.

STUDENT CHANGE OF ADDRESS & CONTACT INFORMATION

It is very important that the Program, as well as the College know the students' place of residence, their contact information and any change of name, address or contact information. If any changes occur, please notify the Program Director, Clinical Coordinator and the College Registrar's Office.

WITHDRAWAL FROM THE PROGRAM

Should a student wish to withdraw from the Program, he/she should submit a request to withdraw in writing to the Program Director. The student must also meet with the Allied Health & Nursing/College Counselor (see GCC Student Handbook). If the decision is final, a written notice of withdrawal with explanation from the student is required. The student will meet with the Program Director for an exit interview. At that time, the student will return all hospital ID badges and the radiation badge. The student will be given a Curriculum Change form and Add/Drop form to be taken to the Registrar's office. A student who must withdraw from the Program due to academic failure and wishes to apply for readmission to the Program must meet with the Program Director before withdrawing. During this meeting, a readmission plan will be developed that will include dates for readmission, health assessment updates, CPR requirements, course registration information and any remediation recommendations.

HEALTH AND SAFETY POLICIES

HEALTH REQUIREMENTS

All students are required to submit a current health assessment completed by a primary care provider within the last twelve (12) months. Documentation of specific student health requirements is mandatory prior to participation in any clinical experiences. Failure to complete and submit the required Health Assessment Form, by the required deadline (June 15th) and the signed Student Statement of Responsibility may result in dismissal from the Nuclear Medicine Technology Program. Clinical affiliate contracts state the student must be in good physical and emotional health and free of communicable diseases.

Certain items may require additional follow-up during the Program (i.e. Hepatitis B immunization, Influenza vaccine, and Tuberculin testing). The student is required to follow all instructions for documentation of immunization status with the required laboratory reports, and to obtain the signature of the health care provider as indicated. The student is strongly encouraged to receive the Hepatitis B immunization series; any student who refuses to receive the immunization must submit the Hepatitis B waiver form. Tuberculin tests (PPD) and Influenza vaccination must be updated on an annual basis and more frequently if required by the clinical affiliate. Each student must have on file current documentation of PPD and Influenza vaccine results.

Non-compliance will result in removal of the student from the clinical affiliate, and may result in a disciplinary sanction. Students who have a history of positive PPD must submit one of the following: CXR report within the past year or Quantiferon Gold lab test.

TECHNICAL STANDARDS

Technical Standards reflect reasonable expectations of the nuclear medicine technology student for the performance of common functions of the registered nuclear medicine technologist. The nuclear medicine technology student must be able to apply the knowledge and skills necessary to function in a board variety of clinical situations (see Appendix E).

CLIMINIAL BACKGROUND CHECKS & TOXICOLOGY SCREENING

Due to clinical learning affiliate requirements, criminal background checks and toxicology (drug) screening is required for all Nuclear Medicine Technology students prior to participation in clinical experiences. Due to this requirement, student refusal of either the background check or drug screening, will result in dismissal from the Nuclear Medicine Technology program due to the inability to complete clinical learning requirements. Students must follow all instructions for obtaining criminal background checks and toxicology screenings.

Students who are found guilty of having committed a felony, misdemeanor and/or are found to have a positive toxicology screen may be prevented from participating in clinical experiences. **Please note, in accordance with federal law, a positive toxicology screen for legally prescribed marijuana may prohibit a student from being placed in a clinical setting that accepts federal funding.** Results of student background checks and toxicology screening do <u>not</u> become a part of the student's educational record, as defined by the Family Educational Rights and Privacy Act ("FERPA").

Please note: The student is responsible for all fees associated with this.

Procedures and Guidelines for Student Toxicology (Drug) Screening and Criminal Background Checks

Confidential toxicology (drug) screening and/or criminal background checks may be required for students prior to participation in the initial clinical rotation utilizing the vendor(s) adopted by the College (i.e. Certified Background, Connecticut League for Nursing/CLN, etc.). The following guidelines are applicable to Toxicology Screening and/or Criminal Background Checks for any student:

1. The need for additional screening/assessment beyond the initial screening/assessment is related to clinical affiliate requirements and/or results of the initial screening/assessment.
2. Notification and recordkeeping of toxicology screening results and/or criminal background checks are performed in a manner that insures the integrity, accuracy and confidentiality of the information.

3. Students are not allowed to hand-deliver results of either toxicology screening or criminal background checks.
4. Students are required to sign a release for results of toxicology screenings and criminal background checks to be sent to their program.
5. Results of toxicology screenings and criminal background checks are NOT a part of the student's "educational record" as defined by the Family Educational Rights and Privacy Act ("FERPA").

TOXICOLOGY SCREENING STANDARDS AND GUIDELINES
The following guides the response to a positive Toxicology Screening for any student:
1. All specimens identified as non-negative/positive on the initial test shall be confirmed, reviewed, and interpreted by the vendor.
2. The student is required to provide documentation by a healthcare provider in the event there is a medical explanation for a positive test result (i.e. a result of a legally prescribed medication).
   Toxicology Screening that requires Retesting:
1. Vendor reports that the screening specimen was diluted.
2. If a student challenges a result, only the original sample can be retested.

Response to a Confirmed Positive Toxicology Screen
If a student tests positive for drugs that are illegal substances, non-prescribed legal substances, or the student is deemed unsafe for the clinical setting by a healthcare provider, the student will be immediately dismissed from the NMT Program. Students will be given an opportunity to discuss the results of the non-negative/positive screen with the Program Director.

Readmission following dismissal from the program in response to a confirmed positive toxicology screen is guided by the following conditions:

1. The student provides documentation from a qualified healthcare professional indicating status of abuse, addiction or recovery and/or documented rehabilitation related to the alcohol/drug abuse.
2. A confirmed negative toxicology screen is documented immediately prior to readmission, and
3. The student meets all other requirements for readmission.

Reasonable Suspicion Screening
Students may also be required to submit to additional toxicology screening during the program in accordance with clinical affiliate contracts when reasonable suspicion of impairment exists.
Reasonable suspicion testing may include, but not be limited to, the following:
1. Physical symptoms such as slurred speech, unsteady gait, confusion or other manifestations of drug/alcohol use.
2. Presence of an odor of alcohol or illegal substance.
3. Abnormal conduct or erratic behavior during clinical or on-campus learning activities, chronic absenteeism, tardiness, or deterioration of performance regardless of any threat to patient safety.
4. Suspected theft of medications including controlled substances while at the clinical facility, and
5. Evidence of involvement in the use, possession, sale, solicitation or transfer of illegal or illicit drugs while enrolled in the NMT Program.

Criminal Background Checks Standards and Guidelines

Students who are found guilty of committing a felony will be prevented from participating in clinical experiences by clinical learning facility policy. If a student cannot participate in a clinical rotation at an assigned facility, s/he will not be able to complete the objectives of the course and program.

If a criminal background check reveals that a student has been found guilty or convicted as a result of an act which constitutes a felony and the student is unable to be placed at a clinical learning site, then the student is unable to meet the clinical objectives/outcomes of the course.

The Program Director notifies the student and the student is provided with the opportunity to withdraw from the program. Should the student refuse to withdraw, the student will be terminated from the program.

Smoking Guidelines

Gateway Community College is a smoke free campus/workplace. Students are required to follow hospital policy regarding smoking. Please be advised that we require all students to come to clinical free from any tobacco product odor. If a student smells of tobacco products, they will be asked to leave clinical immediately and will lose CTO time.

Any student looking for smoking cessation resources may visit the following website for further information: http://www.cdc.gov/tobacco/campaign/tips/quit-smoking/ or call 1-800-Quit-Now.

STANDARD PRECAUTIONS AND HIPAA

Students enrolled in the Nuclear Medicine Technology Program must adhere to all policies and procedures concerning Standard Precautions and Infectious Disease Policies and Health Insurance Portability and Accountability Act of 1996 (HIPAA) as practiced at the assigned clinical affiliate. The defined policy is located in the office of the designated AES or through the Personnel Health Center at the clinical affiliate. Students will be provided with this information during the program orientation and may also have site specific orientation regarding these policies.

Students must never disclose confidential information including anything pertaining to the medical history, diagnosis, treatment, and prognosis to anyone not directly involved in the care of the patient. In addition, students are required to follow HIPAA regulations on "Protected Health Information" which includes any "individually identifiable health information". This includes information such as the individual's past, present or future physical or mental health or condition, the provision of health care to the individual, or the past, present, or future payment for the provision of health care to the individual, and that identifies the individual or for which there is a reasonable basis to believe it can be used to identify the individual. Individually identifiable health information includes many common identifiers (e.g., name, address, birth date, Social Security Number).

Please visit http://www.hhs.gov/hipaa/for-professionals/index.html for more information. Failure to adhere to this code constitutes a violation of the "Right to Privacy Act," as well as HIPAA and is professionally unacceptable, as well as potentially compromising from a medical/ legal standpoint.

Latex Allergies: College NMT laboratories and many clinical sites are not latex-free. Students who enter the Program with latex sensitivity/allergy must notify the Program Director and Clinical Coordinator and develop a plan of action.

HEALTH AND SAFETY TRAINING, BASIC LIFE SUPPORT AND VENIPUNCTURE

Students are required to successfully complete the online CT Hospital Association (CHA) Health and Safety Training Course and Patient Care Orientation (PCO) prior to participation in clinical experiences. Students must successfully pass the PCO training course with a numerical grade of 75% or higher to proceed in the NMT Program. The course for CHA is available at: http://www.hhs.gov/hipaa/for-professionals/index.html
Students are required to provide documentation of current professional level certification in Basic Life Support for adult, child and infant. Certification can only be earned through the

American Heart Association or the American Red Cross and must remain current throughout the Program. Courses meeting this requirement are: The American Heart Association Basic Life Support (BSL) for Healthcare Providers
The American Red Cross CPR/AED for the Professional Rescuer Online CPR courses will not be accepted. A copy of the current certification card must be submitted prior to the start of the first semester in the Program. Failure to comply will result in exclusion from the clinical learning experience. All students must also participate in venipuncture training provided by the NMT Program and/or the clinical affiliate, regardless of previous certifications or training.

TRANSPORTATION AND PARKING
Students are responsible for transportation to and from the college and clinical education sites. Students will travel to clinical affiliates located throughout Connecticut.
Students are subject to the parking regulations established by the clinical affiliates and are expected to park in designated areas only. If a violation occurs, the car may be towed at the student's expense. The College and the NMT Program are not responsible for parking or towing expenses or injury to property sustained at a clinical affiliate site.

MALPRACTICE INSURANCE
Professional liability insurance is provided for students by the College. Students may also purchase additional professional liability insurance on their own.

PREGNANCY STANDARDS-VOLUNTARY NOTIFICATION
The declaration of pregnancy is a voluntary program intended to provide an option for pregnant students who are considered to be occupationally exposed to ionizing radiation. Pregnancy during the course of the Program may present problems for completion of objectives/competencies in the expected time due to the number and variety of courses in the Program curriculum and the necessary clinical assignments required of students in meeting the clinical educational objectives for each clinical course. All Program requirements must be met in order for a student to graduate. The Program Director cannot sign the certification/registry board exam application(s) and/or graduation verification form until the student has met all requirements and has graduated from the Program.
Note: Experience shows that the radiation workers in this Program generally receive to the whole body well below 500 mrem per year, 50 mrem per month, and it is most unlikely that there will be any problems adhering to the fetal exposure limits. Through proper instruction, strict adherence to safety precautions and through personnel monitoring, it is possible to limit occupational exposure to under 0.5 rem during the period of gestation.

In the event, however, that a student becomes pregnant, she has the option to declare or not declare her pregnancy. Declaration of pregnancy is a voluntary option and may be withdrawn at any time. The student has the right to not declare pregnancy and remain in the Program with no modifications. The student may revoke a declaration of pregnancy at any time (this must be submitted in writing). Choosing not to declare a pregnancy will result in no exemption from the specific radiation protection regulations limiting the exposure to the embryo/fetus. Whether or not pregnancy is declared, the pregnant student is advised to consult with her physician. The Program will not assume liability in any case of pregnancy.

In the event of a suspected or confirmed pregnancy, it is the responsibility of the student to advise her Program Director in writing of her condition if she chooses to declare her pregnancy.

Pregnancy will not affect the student's enrollment in the academic courses in the Program. However, due to the physical requirements placed upon the student in the clinical courses and assignments, and in order to comply with 10 CFR Part 20.1208 to keep the radiation exposure to the fetus as low as reasonably achievable (no more than 500 mrem and 50 mrem per month during the gestation period), the following procedures will apply:

1. The student may <u>voluntarily</u> report a suspected or confirmed pregnancy to the Program's Radiation Safety Officer (Dr. Ann-Marie Jones, (203) 285-2381; (203)752-8427.
2. The RSO will determine the estimated radiation dose from the time of conception to the date of declaration based on dosimetry records and calculate the permissible remaining dose to the embryo/fetus for the remainder of the pregnancy.
3. Upon review of the findings and recommendations of the RSO, current and future clinical assignments will be reviewed by the Program faculty. Clinical assignments will be altered if the fetus received the maximum permissible dose as stated by 10 CFR Part 20.1208. Any clinical competencies not completed for reasons related to pregnancy must be successfully completed prior to graduation.
4. If a student voluntarily decides to declare her pregnancy she must complete and sign the Declaration of Pregnancy Form (see Appendix F). The original from will remain with the RSO. A copy will be provided to the student, and a copy must be submitted to the Program Director to place in the student file.
5. Within 1 week of voluntary declaration of pregnancy, the declared pregnant student must provide the Program Director with written indication of intent to:
a. Continue in the program with or without modifications, or
b. Take a medical leave of absence with intent to complete the Program, or
c. Withdraw from the Program
6. The declared pregnant student must provide the program director with written letter from her physician including the estimated date of conception and estimated date of delivery as well as providing medical clearance for:
a. Continuing in the Program as a full-time student, and/or
b. Any limitations placed upon the student while enrolled in the Program.
7. All clinical days/hours missed by the student must be made up which may result in a delay in the completion of the Program.
8. The student will be expected to complete all the requirements for any sequential, didactic course(s) in which she is enrolled prior to enrolling in the next semester's coursework. Prerequisite courses must be completed prior to the beginning of the next course.

Note: Experience shows that the radiation workers in this program generally receive to the whole body well below 500 mrem per year, 50 mrem per month, and it is most unlikely that there will be any problems adhering to the fetal exposure limits. Through proper instruction, strict adherence to safety precautions and through personnel monitoring, it is possible to limit occupational exposure to less than 0.5 rem during the period of gestation. The pregnant student will be expected to complete all the requirements for any sequential, didactic course(s) in which she is enrolled prior to enrolling in the next semester's coursework. Prerequisite courses must be completed prior to the beginning of the next course. All clinical days/hours missed by the student must be made up prior to graduation. If a leave of absence is taken, the student must comply with the NMT Program Readmission Policy.

If the student wishes to return to the Program within six weeks after the pregnancy is complete, she must submit to the Program Director verification of medical clearance from her physician.

RADIATION POLICY

MONITORS FOR RADIOLOGY STUDENTS OCCUPATIONALLY EXPOSED TO IONIZING RADIATION (updated 6/2017)

I. **POLICY**

It is the policy of all clinical affiliates to adhere to both State and Federal regulations regarding the bioassay services and use of personnel monitoring devices by students occupationally exposed to ionizing radiation. The information gained through their use will be used to keep individual and collective exposures As Low As Reasonably Achievable (ALARA).

II. **APPLICATION**

This policy applies to any Gateway Community College Radiology student occupationally exposed to ionizing radiation who, in any calendar quarter, receives or is likely to receive, a dose greater than 10% of the applicable maximum permissible dose limit as recommended by the National Council on Radiation Protection and Measurements (NCRP), and incorporated in State and Federal regulations (see Table I). Personnel monitors will be issued on a monthly or quarterly basis as determined by the Nuclear Medicine Program Radiation Safety Officer (RSO), according to expected exposure levels.

III. **ADMINISTRATIVE GUIDELINES**

A. Radiation monitors will be issued to:

1. All Radiology students who in the course of their work may receive external or internal radiation exposures greater than 10% of the maximum permissible limit.

2. Bioassay services will be provided to students when necessary as determined by the Radiation Safety Officer (RSO).

3. Internal doses received will be modified according to the weighting factors identified in Table II and the summed with external doses to determine the Total Effective Dose Equivalent (TEDE).

4. All occupational dosimetry results will be kept on permanent file by the Radiation Safety Officer. Duplicate copies of the monthly or quarterly monitoring results will be distributed to the Clinical Coordinator for review with students to keep them informed of their personal exposure history. Individual exposure summaries will be provided to each monitored student who exceeds 0.1 REM annually and upon request.

5. Quarterly exposures that exceed 10% of the quarterly maximum permissible limit will be highlighted in yellow on the duplicate reports and a summary of the results will be presented at the quarterly Radiation Safety Committee meeting. Quarterly exposure levels that exceed 30% of the quarterly maximum permissible limit will be highlighted in red on the duplicate reports and reported to the individual involved and the Clinical Coordinator and Program Director. The RSO will investigate these exposures to determine their cause and implement measures to reduce such exposures, consistent with the ALARA policy. The results of these ALARA investigations will be presented at the quarterly Radiation Safety Committee meeting.

   B.   Students, who believe that they are occupationally exposed to levels greater than 10% of the applicable maximum, may request an assessment of their situation by the Radiation Safety Officer.
   C.   If, in the Radiation Safety Officer's judgment, these students are potentially exposed to more than 10% of the applicable maximum, radiation monitors will be issued for a three-month trial period. At the end of the trial period, the RSO will determine if the exposures received indicate that permanent monitoring is necessary.
   D.   The RSO may terminate existing monitoring if the student's exposure history indicates that he/she is not likely to be exposed to radiation in excess of 10% of the applicable maximum.
   E.   It is recommended that occupationally exposed students, i.e. those who are monitored for radiation exposure, who become pregnant, should notify the RSO as soon as their condition is confirmed. The RSO will then schedule a meeting with the student to discuss her radiation-exposure history, the risks to the fetus, and measures that can be taken to minimize the dose to the fetus.

If the student's previous radiation history indicates that her occupational exposure may exceed 0.5 Rem during the gestation period, she may voluntarily decide to formally declare her pregnancy to the Program and clinical affiliates by signing a letter that includes her name and estimated date of conception. If a student formally declares pregnancy, the Program/ clinical affiliates will take reasonable steps to avoid substantial variation above a uniform monthly exposure rate to assure that fetal exposure will not exceed 0.5 Rem during the gestation period. If the dose to the fetus is found to have exceeded 0.5 Rem or is within 0.05 Rem of this dose by the time the student declares her pregnancy, the Program/clinical affiliates will limit additional dose to no more than 0.05 Rem during the remainder of the pregnancy. This may be accomplished by a modified clinical training schedule, withdrawal from the Program, or by a leave of absence. If the student chooses to not make a formal declaration of her pregnancy, she may remain in her present position, and will be subject to the normal occupational dose limits (see Table 1), and the program/clinical affiliates will not be required to limit the exposure to the embryo/fetus to 0.5 Rem.

IV. RESPONSIBILITY

F.   Radiation Safety Officer (RSO)
      Shall be responsible for the issuance, collection, termination and record keeping requirements of the radiation monitoring program. The RSO will investigate unusual or unexpected exposures to ensure that ionizing radiation exposure is kept As Low As Reasonably Achievable (ALARA). The RSO will consult with students, supervisors, management and others as necessary to assist them to make informed decisions regarding occupational exposure and keeping exposure ALARA.

G.   Occupationally Monitored Students
     Shall be responsible for wearing their radiation monitors as instructed during all scheduled work hours. Students shall not engage in any radiation procedures without wearing their radiation monitors. Monitors should not be worn while the student is off duty or during medical treatments or examinations requiring exposure to radiation. To assure the quick and efficient exchange and reading of monitors, they should be returned to the RSO within one week after receipt of replacement monitors.
H.   Program Director/Clinical Coordinator
     The Program Director/Clinical Coordinator will make a reasonable effort to find a suitable accommodation for declared pregnant students who have exceeded the
     0.5 Rem during their gestation period. This may be accomplished by a modified clinical training schedule, withdrawal from the Program or by a leave of absence.

DISCIPLINARY ACTION
I.   Failure to perform badge dose readings at time intervals designated by the Program Director (RSO) or Clinical Coordinator will result in immediate disciplinary sanctions in accordance with the proscribed Program Disciplinary Standards located in this handbook.

J.   Tampering with the radiation monitor or exposing it to ionizing so as to cause a false positive reading shall be considered a <u>serious</u> offense in accordance with Radiation Policy and will result in immediate dismissal from the Program.

TABLE I
MAXIMUM PERMISSABLE OCCUPATIONAL RADIATION EXPOSURE LIMITS

		Quarterly Limit	Annual Limit
1.	Total Effective Dose Equivalent (TEDE) including Weighted Internal Doses	1.25 Rem	5 Rem
2.	Lens of Eye 3.75 Rem	15 Rem	
3.	Extremity, Skin or Individual Organ Dose Rem	12.5 Rem	50
4.	Skin of the whole body Rem	12.5 Rem	50
5.	Embryo/Fetal Dose (Declared Pregnancy) Rem	0.05 Rem	0.5

ALARA GOALS

Level I Level II

				Level I	Level II
Maximum Permissible Exposure	10%				
	30% (millirem/Quarter)				
Total Effective Dose Equivalent (Includes deep whole body dose plus weighted single organ doses)	1,250 mRems/3 months 5,000 mRems/year	or		125	375
Lens of the Eye	3,750 mRems/3 months 15,000 mRems/year	or		375	1,125
Individual Organ Limit (Includes hands, forearms, feet and ankles)	12,500 mRems/3 months 50,000 mRems/year	or		1,250	3,750
Declared Pregnant	500 mRems/9 months			less than 50	

mR/month Occupationally Exposed Personnel

1. The ALARA program tries to maintain exposures below 10% of the limits listed above.
2. If you are actively planning a pregnancy or become pregnant, notify the RSO as soon as possible. Request an appointment with the RSO so you can review your past exposure history to determine if further measures are needed to minimize dose to the fetus.
3. If you are not familiar with radiation safety techniques, contact the RSO. The RSO can provide you with the information you need to minimize your exposure.
4. You can contact the NMT Program RSO, Dr. Ann-Marie Jones at (203) 285-2381; (203) 752-8427

PROFESSIONAL APPEARANCE

NMT PROGRAM DRESS CODE REQUIREMENTS FOR CLINICAL

Be aware that your personal appearance is as important in good patient care as are your words and actions. Professional dress codes are designed to assure appropriate clothing for the work involved, as well as to project the necessary clean and professional image that is so valuable in building patient confidence.

An established dress code serves two purposes:
- Creates a professional atmosphere that ultimately leads to patient confidence.
- Provides for and maintains staff and student safety.

Attire: Navy blue uniform or scrub pants and tops. White t-shirt can be worn underneath to ensure no chest hair or cleavage is visible. Uniform attire designated by program should be properly maintained. Uniforms must be clean and free of stains, wrinkles and odors. Tattoos must be covered. There are to be no other combinations worn.

Lab coats: Long white lab coat embroidered with the GCC logo and Program name in navy blue embroidery (long sleeves and it must be 37-40" in length to fall below the knee cap). The nuclear medicine student must wear a long white lab coat while in a nuclear medicine department and during the clinical labs.

Shoes: White closed toe and closed heel non-skid sole shoes and white socks. No logos. No clogs. No high heels. Regulation white leather uniform shoes (purchased at a uniform shop)

or white leather low top sneakers can be worn. Sneakers should be all white-no color stitching or colored laces. High top sneakers are not allowed. The shoes must be polished at all times.

Hair: Hair longer than shoulder length will be securely tied back to keep it from coming into contact with patients. Hairstyles and accessories are to be conducive to the professional atmosphere of the clinical affiliate. Hair ornaments, such as bows, decorative barrettes or combs may not be worn with the student uniform.

Personal Hygiene: Individual hygiene practices should assure the lack of personal odors that may be offensive to others. Male students are to be clean shaven. If a student has a beard or mustache it must be neat, clean and well-trimmed.

Jewelry: For purposes of safety and protection, earrings must not extend beyond ear lobes and ornamental rings are not permitted in direct patient care areas. Necklaces, excessive rings and ornamental jewelry of any kind are not permitted. Any type of nose, facial, tongue, or visible body jewelry is not permitted during clinical labs and at the clinical site. These may be hazardous to the patient, as well as the student.

Fingernails: Fingernails shall be kept at a length of no more than ¼ inch, as recommended by the CDC, clean and well-manicured for both patient protection and good infection control (the ¼ inch measurement pertains to the white part of the nail extending from the nail bed at the distal end of the finger). Nail polish, if worn, must be neatly maintained (free of cracks and chips).

Polish must be either clear or pastel in color. Bright or dark colors are not acceptable. Rhinestones, sparkles, designs or foreign bodies/nail jewelry are not permitted. Artificial nails and nail tips are prohibited.

Cosmetics: Cosmetics, including perfume/cologne/after shave is not to be worn.

Identification: Radiation monitors and student ID badges from GCC and the clinical affiliate must be worn at all times. Lanyards are not allowed. All IDs must be visible and attached to the lab coat. All hospital ID badges must be returned to the clinical site or the Clinical Coordinator at the designated site upon completion of the clinical rotation.

> **Smoking, chewing tobacco, chewing gum or the smell of tobacco products on students are not permitted in the clinical setting.**

Other Required Supplies: The student is also required to have the following:
- a small notebook that will fit in the student's lab coat pocket for clinical notes.
- a binder to keep all clinical handouts from Clinical Practicum labs.

Program faculty and Clinical staff/AES reserve the right to dismiss or restrict a student from the clinical setting for failure to comply with the dress code and/or extremes in personal grooming. A student who does not comply with the Dress Code while at any of the clinical affiliates will be dismissed from the affiliate site until the next clinical day, will receive a written warning and student's clinical evaluation for that rotation will be affected. Each day the student is out of compliance with the Dress Code will result in a loss of CTO time.

CHANGE IN STUDENT INFORMATION

It is very important that the Program Director has the most up-to-date contact information for each student. Any change in name, address, phone number or email address should be immediately provided to the Program Director, Clinical Coordinator, and College Registrar's Office.

STUDENTS' ADDITIONAL PAYMENTS RESPONSIBILITIES:

In addition to tuition, student financial responsibilities include:
The student is responsible for all fees associated with the following Program requirements:
Textbooks - $1500
Uniforms - $200
Toxicology Screening & Background Check - $130
Trajecsys online clinical documentation system - $150
Castle Branch/Certified Background online health management system - $35
Radiation (Dosimetry) badges - $55
Ring (Dosimetry) badge - $16 (4$ per quarter).
Transportation and associated costs – Variable Health care immunizations and titers – Variable BLS or CPR/AED – Variable
*These fees are approximate and subject to change. If a student takes a leave of absence from the program, they will need to cover additional program fees as needed.

CLINICAL GUIDELINES

CLINICAL EDUCATION SYSTEM
Rationale:
The clinical aspect of the Nuclear Medicine Technology Program is of utmost importance. Clinical skills must be performed regularly in an accurate, professional, and caring manner. The GCC program has developed competencies and an evaluation system to meet these standards.
Clinical education is broken down into specific categories:
- Equipment
- Technical Skills
- Patient Care Skills
- Behavioral Skills
- Radiopharmaceutical Skills

In addition, clinical objectives specific to each semester or course have been developed. Refer to the Nuclear Medicine Technology Program's Clinical Objectives.

The student is instructed and gains knowledge in a logical sequential manner. Basic skills are taught and knowledge is demonstrated before more complex ones are introduced. Once these individual skills are mastered and documented (daily log sheets), the student then proceeds to be tested in an orderly manner. Competency testing occurs after the student has met the following requirements*:
- lecture on the subject matter
- simulated lab practical or demonstration
- lab exam
- course exam
- documentation of observation and knowledge of specific skills (clinical log record).

*Students are allowed to attempt competency testing without meeting all of the above requirements on procedures which are performed infrequently (at the discretion of the Program Director and/or Clinical Coordinator).

Once the student attains a competency in any area or procedure, he/she shall maintain and practice their skill, or the competency will be revoked and will need to be repeated successfully in order to graduate from the program. Competencies are not assigned a percentage of the clinical grade, but are assessed on a Pass/Fail basis. Students must complete the required number of competencies required per semester (including winter and summer sessions) to remain in the program.

At the completion of the Program, the student will have demonstrated and documented entry- level skills for a nuclear medicine technologist.

Method of Training:

The student will rotate through the Nuclear Medicine Departments of the clinical affiliates in such a manner as to provide for sufficient exposure to a variety of exams and procedures. During the rotation the student observes, assists, and demonstrates each skill as it is taught and acquired. Each assigned area is considered a clinical learning lab, and each area is assigned a clinical instructor. Strengths are discussed, and weak areas are addressed. Students are afforded ample opportunity to complete all assigned task objectives and competencies.

Goals for Clinical Practicum:

The clinical practicum in the Nuclear Medicine Technology Program serves a twofold purpose. First, the student will learn to perform all imaging procedures and patient interaction skills.

Secondly, the clinical practicum will allow the student to gain competence to perform at expected entry level necessary to face the responsibilities the student will need as a future technologist and employee.

The only way the faculty can assess the student's skills and anticipated behavior as a technologist is by observing the student's performance in the clinic. The skills the student develops during the time spent in this Program, are skills that will follow the student in the future as an employed technologist.

CLINICAL OBJECTIVES

Gateway Community College and Hospital Orientations:

The student is required to attend all hospital orientation sessions in the summer before the freshmen fall semester. During this time the student should become familiar with the affiliates, and will attend a variety of lectures and workshops. The student may also be assigned to their clinical rotation for a period of observation during the College orientation period.

During the GCC Orientation the student is responsible for Radiation Safety, Medicolegal Ethics, Patient Care, Medical Terminology and Program Specific Lectures.

It is the student's responsibility to master all material covered during the College and hospital orientations in order to continue in the Program.

Goals for Orientation and Observation:

Student will be able to:

1. Describe the position of the nuclear medicine department in the organizational chart of a health care institution.
2. Name the major divisions within a radiology/diagnostic imaging department, and describe their function and location.
3. Describe the personnel policies of the institutions that are relevant to students.

4. Name the "Code" numbers used at the clinical affiliates, and state the emergency dialing procedures for fire, cardiac arrest, security, etc.
5. Describe the location of the emergency equipment within the nuclear medicine departments.
6. Describe the physical layout of the clinical affiliates, and the system used to locate patient rooms.
7. Describe the physical layout of the nuclear medicine departments. Name and identify the equipment (cameras, computers, etc.).
8. Describe how to use the telephone system in the departments.
9. Describe the lines of communication in the nuclear medicine departments, and in the Nuclear Medicine Technology Program.
10. Describe what is expected in the clinical education segment of training.
11. Describe the Patient Care Partnership, the Radiologic Technologist's Code of Ethics, and the Nuclear Medicine Technologist's Code of Ethics, and how they apply to the everyday practice of nuclear medicine technology.
12. Complete with a 75% or better the course work and exams by the end of the orientation period.

Freshmen/Fall at Secondary Level:

At this level the student observes, assists and takes clinical notes. In some areas, this level overlaps with orientation activities. The student will attend clinical practicum 16 hours per week, and follow the assigned clinical rotation.

Goals for Freshmen/Fall Semester:

Student will be able to:

Departmental Procedures:

1. Describe the departmental procedures for; patient scheduling, dose administration, room assignments, images, data, or report processing, patient record filing system, and retrieval of previous reports/films.
2. Describe the departmental daily area survey routines, and regulations for storage, waste disposal, and general supplies access regulations.

Imaging Procedures:

1. When given a routine imaging requisition:
a. locate and review requisition
b. retrieve and/or prepare patient file
c. identify relevant patient data from medical record and record on requisition, as appropriate
d. obtain positive patient identification

2. Correctly positions patient for procedures.
3. At the time of imaging, use correct body mechanics to move patient on and off the imaging table, as well as during the study.
4. Correctly label and assemble all images for presentation to the physician or technologist (this includes notation of anatomical landmarks as appropriate).
5. Correctly complete all departmental forms/documentation.
6. Conduct study in an ethical, safe and professional manner.

<u>Nuclear Instrumentation- Scintillation Cameras</u>:

Student will be able to:

1. Given an imaging examination requisition to be performed on a scintillation camera, correctly prepare the instrument for the procedure, to include:
a. selection and attachment of proper collimator
b. selection and adjustment of imaging parameters, according to department protocol
2. For a given scintillation camera, perform and analyze a field uniformity check to include:
a. selection of a radionuclide source of appropriate quantity and energy
b. check photopeak and energy spectrum.
c. obtain uniformity images using identical standardized imaging parameters, including counts and intensity
d. comparison of current field uniformity image with previous images, and identification of any nonuniformities
3. For a given scintillation camera field uniformity image that demonstrates nonuniformity, differentiate and determine the source of nonuniformity using correct procedures, to include:
a. collimator check for image or foreign objects
b. flood source check for homogeneous distribution of radioactivity, as appropriate
c. check photopeak
d. scintillation detector check for probability of cracked crystal, or loss of hermetic seal
4. Given a scintillation camera quality control results that are abnormal, evaluate the results, and notify the supervising technologist.
5. Given a scintillation camera, perform and analyze a detector linearity check, to include:
a. placement of a parallel line phantom and uniformity check source in correct position, with the phantom closest to the detector
b. obtaining at least two images oriented 90° to each other, using the standardized imaging parameters from the field uniformity check.
c. evaluation of the images and identification of any line distortion on the image
6. Given detector linearity check images on a scintillation camera which demonstrate line distortion, determine the source of nonlinearity to include consideration of the following:
a. camera system
b. components of the system
c. detector source geometry
d. consistency of protocol with previous checks
e. notification of supervising technologist, if necessary
7. For a given scintillation camera, performs, and analyze a spatial resolution check, to include:
a. use of a field uniformity check source and high resolution phantom compatible with the specified resolution of the camera
b. obtaining resolution images oriented 90□ to each other, using standardized imaging parameters according to departmental protocol
c. comparison and evaluation of images with prior resolution images and determination of unacceptable change in resolution
d. as appropriate, contacting the chief technologist for determination if service is needed

8. When assigned to complete quality control procedures on the departmental camera(s), demonstrate an appreciation for the importance of quality functioning by maintaining instrumentation, to include:
a. performing each quality control exam with the accepted frequency
b. using standardized protocols for each exam
c. recording the results of each quality control procedure
d. comparing each result with a series of previous results to determine whether significant variation occurs
e. contacting the supervising technologist if any questionable results are obtained

Radiation Safety and Protection: Personnel Monitoring Devices:

Student will be able to:
1. Consistently wear whole-body and ring badges.
2. Consistently follows dress code, including lab coat and closed toe and heel shoes.
3. Regularly review the monthly and cumulative personnel exposure records with regard to occupational dose limits.
4. Recognize and take appropriate measures to reduce exposure.
5. Keep exposure as low as reasonably achievable by using appropriate protection parameters continuously.

Radioactive Waste Disposal:

Student will be able to:

Consistently use the correct waste disposal methods for syringes, vials, needles, contaminated articles, and radioactive waste, as defined by the radioactive materials license and departmental design and protocol.

Licensing Requirements:

Student will be able to:
1. Identify and locate parameters of the department's radioactive materials and license.
2. Demonstrate an appreciation of the license and federal requirements and parameters by consistently performing the following tasks:
a. disposing of radioactive waste in the appropriate manner
b. maintaining levels of radiation to the limits identified by the radiation signs in all areas

Patient Care and Preparation for Nuclear Medicine Procedures: Nonemergency:

Student will be able to:
1. Use correct body mechanics and support holds when moving or assisting patients.
2. Use side rails on stretcher, locks on wheelchair and step stool for patients, as appropriate.
3. Monitor the disoriented, unconscious, sedated, or pediatric patient.
4. Provide for patient comfort before, during, and after performing the nuclear medicine procedure.
5. Use correct isolation procedures (standard precautions), as indicated.
6. Correctly care for, observe, and know when to ask for help when caring for a patient with: intravenous tubing; nasogastric (NG) tubing; chest tubes; urinary retention catheters; surgical dressings; CVP lines; colostomy; oxygen tubing, etc.
7. Assist patients with use of bedpans/urinals or emesis basins, as needed. Emergency:

Student will be able to:
1. Determine vital signs, as needed, including blood pressure, pulse, respiratory rate, and temperature.
2. Recognize an emergency that requires immediate notification of a physician, and make the proper notification.

3. Recognize an emergency that requires immediate notification of the hospital "code" team, and make the proper notification.
4. Perform cardiopulmonary resuscitation techniques appropriately, if necessary.
5. Find and assist with the use of the emergency cart, as appropriate.
6. Maintain life support equipment, as appropriate.
7. Provide appropriate care in response to patient seizures, hemorrhage and/or fainting.

Professional Behavior and Concern for Patient:

Student will be able to:

1. Welcome the patient to the department, making the proper introduction and addressing the patient by name.
2. Address patients, families, co-workers, and the faculty and staff members (clinical and academic) by appropriate names or titles.
3. Demonstrate no ridiculing, degrading, or discriminatory attitudes, comments, or behaviors in the clinical affiliates.
4. Avoid the display of emotional reactions, such as distaste, disgust, and/or surprise.
5. Refrain from discussing anything confidential or potentially alarming to the patient within the patient's hearing.
6. Refrain from any discussion of a patient with colleagues in patient areas, and/or in any way that is not pertinent or relevant to the procedure or patient care.
7. Prevent unnecessary exposure of the patient's body.
8. Work proficiently and schedule carefully in order to minimize patient waiting periods as much as possible.
9. Provide an explanation and apology when a patient must be kept waiting, and assure the patient that he/she is not forgotten.
10. Make certain that the patient is comfortably warm, and not exposed to drafts.
11. Provide support for various parts of the patient's body by using pillows, wedges, etc. in order to position the patient as comfortable as possible.
12. Display understanding, cheerfulness, and interest in the patient.
13. Hold in confidence any information offered by the patient, unless considered important to the physician's diagnosis.
14. Provide safe storage for the patient's personal belongings during the examination.
15. Report any changes in the patient's condition to the appropriate person.
16. Follow the rules and regulations of the department.
17. Recognize personal limitations and responsibilities in the clinical situation, seeking assistance, suggestions, and approval as appropriate.
18. Use medical terminology appropriately.
19. Relate to the patient before the examination begins, what the examination involves, what the patient will feel, and what is required of the patient.
20. Adapt the explanation to the age, degree of illness, intelligence, and possible language difficulties of the patient such that it is consistent with the patient's ability to understand.
21. Communicate with the patient throughout the procedure to ensure patient comfort and cooperation.
22. Demonstrate sensitivity to the feelings, fears, doubts and embarrassment of the patient.
23. Provide comfort through a constant presence, a gentle touch, and a calm approach, as needed by the patient.

Administrative/Management Functions:
Student will be able to:
1. Inventory supplies and determine when to restock routine items, as well as radiopharmaceuticals that have specific shelf lives.

2. Develop a personal procedure manual through clinical notes to reflect the level of knowledge of procedures performed at the clinical affiliates.

Freshmen/Winter & Spring- Hands-on Secondary Level:
At this level, the student should perform procedures step-by-step as the technologist gives directions and assistance. During this phase, the role of the evaluator diminishes as the proficiency of the student increases. The student must maintain and improve on Freshmen Fall objectives while striving to attain Freshmen Spring objectives. The student will attend clinical practicum 40 hours per week during intersession, and 16 hours per week during the semester, and will follow the assigned rotation. The student will also begin rotating through the radiopharmacy.

Goals for Freshmen Winter & Spring Semester:
Imaging Procedures:
Student will be able to:
1. When given a routine imaging requisition:
a. establish whether the patient has undergone the necessary pre-examination procedures, as appropriate
b. determine whether the patient has received any medication or had any examination that would interfere with or contraindicate the nuclear medicine study
c. select proper functioning instrument, collimator, and auxiliary equipment for the study
d. as appropriate, select the correct parameters for data acquisition using a computer
2. Given a set of images that are unlabeled, and the type of imaging study, correctly label each view.

Radiopharmacy: Radionuclide Generator Systems (can be simulated in a Clinical Practicum) and unit doses:
Student will be able to:
1. Given a Mo-99/Tc-99m generator, demonstrate the correct procedure for elution, to include:
a. assembly of shield, vials, and all materials necessary for aseptic elution of the generator
b. performance of complete procedure behind a lead shield using gloves
c. attachment of vials to correct input and output needles
d. use of shield on vial that will contain the eluate
e. assay of eluate in the dose calibrator, and recording of eluate activity in the appropriate radiopharmaceutical accountability log/radiopharmacy computer system
f. mental check to determine if volume and activity eluted are appropriate to volume used and activity expected for that day
g. label and verify the vial/shield with the appropriate information, to include: activity; volume; concentration; date and time of assay; and, the type of radiopharmaceutical

2. Given a Mo-99/Tc-99m generator eluate, correctly perform a Moly breakthrough test, to include:
a.   determination of the Tc-99m activity per volume using the appropriate dose calibrator setting
b.   determination of the Mo-99 activity per volume using the appropriate dose calibrator setting
c.   calculation of Mo-99 activity per mCi of Tc-99m
d.   determination as to whether this concentration is acceptable for use
e.   in the event that this is an unacceptable level of Mo-99, determine why this occurred, and take appropriate measures (contact the supervising technologist)
f.   record results

3. Verify and adjust unit doses according to departmental procedures and policies.
4. Discard all waste from the preparation of radiopharmaceuticals in the radioactive or nonradioactive waste, as appropriate.

<u>Radiation Safety and Protection</u>: <u>Surveys</u> Student will be able to:

1. Perform area surveys of the radiopharmacy and department, to include:
a.   calibration and check of survey instruments
b.   use of departmental protocol to determine areas for survey
c.   use the correct survey instrument for each level of radiation
d.   interpretation of results and notification of personnel, as appropriate
e.   wipe tests and decontamination procedures, as appropriate
2. Receive and process radioactive shipments, including the generator, in the laboratory, as follows:
a.   logging in the receipt of radioactive shipments
b.   visually determining damaged packaging, and taking appropriate precautions
c.   monitoring packaging materials
d.   contacting the Radiation Safety Officer (RSO) in the event of receipt of contaminated material
e.   performing wipe tests, as appropriate, on exterior packaging and radioactive material containers
f.   defacing the radiation sign on all uncontaminated discarded packaging
g.   storage of the radioactivity in the appropriate area according to the storage needs and activity level of the material
h.   notification of the manufacturer in the event of receipt of damaged goods <u>Licensing Requirements</u>:

Maintaining records of radioactive material use and disposal (accountability).

<u>Administrative/Management Functions</u>:

Student will be able to:
1. Interact with hospital and departmental staff to schedule patient studies effectively to include the determination of the correct sequence for multiple procedures, both in nuclear medicine and in radiology.
2. Maintain appropriate records of patient doses, QC procedures, radioactive waste disposal, patient reports, film reports, and all other records required by the hospital, JC, NRC, or licensing body.

Freshmen /Summer at Primary Level:
At this level, the student should continue improving on his/her ability to perform exams with less direct supervision or assistances from the technologist. The student must maintain all previous levels' objectives while striving to attain competency requirements. The student will attend clinical practicum 40 hours per week, and will follow the assigned clinical rotation. The student will begin dose administration, I.V. insertions, kit preparation, and attain required competencies.

Goals for Freshmen/Summer Internship:
In Vivo Nonimaging Procedures- Operation and Quality Control of Laboratory Equipment:

Student will be able to:

Given a requisition for a routine thyroid uptake, perform the procedure, to include:
a.   questioning the patient regarding previous medications, radiology studies using contrast media, pregnancy, and previous nuclear medicine procedures before performing this procedure
b.   measurement of thyroid background
c.   oral administration of radioactive iodine and patient instruction to return at appropriate time
d.   preparation of the standard equivalent to patient dose upon patient return, counting each of the following for standard time according to departmental protocol thyroid gland at standard distance standard activity in the thyroid phantom (at standard distance) blood background room background calculation of thyroid uptake at that specific time
e.   repeat (e) and (f) as required by department protocol
       In Vivo Imaging Procedures:
Student will be able to:
1. When given a routine imaging requisition:
a.   calculate the correct radiopharmaceutical dose to be used
b.   set up injection tray, and measure the correct radiopharmaceutical and dose
c.   correctly select and adjust instrument parameters for the images as each view is performed
d.   correctly position the patient for all views normally performed with the study
e.   objectively evaluate the study for technical mistakes, and identify necessary repeats or changes (notifying supervising technologist first), as appropriate
f.   conduct patient interview, explain study, and obtain formal consent when needed
2. Demonstrate routine acquisition of data on the computer for appropriates studies. To be acceptable:
a.   perform startup procedure
b.   select and enable appropriate work area for acquisition
c.   enter appropriate patient data, creating a patient file
d.   select/enter appropriate program for acquisition
e.   if applicable, set up special program for acquisition
f.   select/enter appropriate parameters for the type of acquisition
g.   check accuracy of previously selected parameters
h.   acquire study
i.   verify that the study has been stored on the computer, and on the archival system, if appropriate

3. Demonstrate routine computer analysis of dynamic data. To be acceptable:
a.   select appropriate study for analysis
b.   generate output study, if necessary
c.   select appropriate images for requisite region(s) of interest
d.   select appropriate region(s) of interest for type of analysis to be done
e.   generate curves from region(s) of interest
f.   analyze curves for necessary data

<u>In Vivo Imaging Procedures</u>:

Student will be able to:
1. When given a routine imaging requisition:
a.   take appropriate corrective action or make appropriate notation on requisition if patient has either not undergone necessary pre-examination procedures, or, has had any medication or examination that would interfere with the nuclear medicine study
b.   identify localization time, and determine injection time and time at which imaging should be
performed
c.   correctly administer radiopharmaceutical according to procedure protocol, where permitted by
law or policy
d.   correctly position patient for all views in the study, considering specific patient situation and
instrument used
2. Given a request for a lung ventilation scan using Xe-133, set-up and determine functional status of the trap or special ventilation system to be used, and use it correctly during the procedure.
3. When preparing for cisternography, set-up the injection tray and assist in preparing and maintaining a sterile field for intrathecal injection by the physician.
4. Given a request for a dual radiopharmaceutical study, correctly sequence the injections for the study, and perform the study according to department protocol.
5. When performing cardiac stress testing, correctly place ECG leads and use and calibrate auxiliary equipment, including ECG machine and exercise/stress equipment.
6. When performing cardiac stress testing, recognize and correctly respond to signs and symptoms of patient stress. Note: a student should not be expected to participate in stress testing without the presence/assistance/supervision of a physician.
7. When performing cardiac stress testing with pharmaceuticals, properly calculate and prepare stressor and antidote drugs and recognize symptoms indicating need for an antidote to the stressor.
8. When performing a PET/CT procedure, obtain correct information during the interview process, explain the study to the patient and/or parents of a pediatric patient at a level that can be understood, perform glucose testing, administer the appropriate dosage of radiopharmaceutical and contrast media, allow sufficient time for the uptake, prepare patient for the imaging procedure, perform the study according to department criteria, follow appropriate radiation safety procedures during emission and transmission imaging.

9. Given a set of labeled images from a routine imaging study, describe the image and identify region(s), if any, of abnormality, and determine whether the abnormality is attributable to artifacts from radiopharmaceutical problems, system malfunction, technically induced artifacts from incorrect administration of the radiopharmaceutical, positioning, patient movement, prosthesis or radiation therapy portals, or an abnormality of the patient himself/herself.
10. Demonstrate an appreciation for the importance of technical quality and the role of the nuclear medicine technologist by consistently:
a.   performing a given study using identified departmental protocol
b.   evaluating images for artifacts, and repeating if necessary
c.   presenting to the physician any information relative to the study that might assist in the diagnosis
d.   maintaining a professional approach to all patients, peers, and other hospital and academic personnel.

<u>Dose Calculation and Administration</u>:
Student will be able to:
1. Given a request to calculate the exact dose of a specific Tc-99m labeled radiopharmaceutical for a certain study, a calculator for Tc-99m:
a.   verify patient name and age, and the study requested from the requisition
b.   identify from the label on the radiopharmaceutical vial the following information:
i.   concentration
ii.   total activity
iii.   total volume
iv.   assay time
v.   date of assay
vi.   expiration date
c.   determine the elapsed time between assay calibration and required dose calculation time
d.   calculate activity remaining using the appropriate decay factor for the time elapsed
e.   calculate the activity needed for the procedure
f.   determine the volume of the radiopharmaceutical required for the patient dose
g.   log appropriate data into radiopharmaceutical dispensing records for the radiopharmaceutical assay
2. Given a patient requisition for a study using a radiopharmaceutical other than Tc-99m, plus a calculator:
a.   verify patient name, study requested, age and dose range required of the radiopharmaceutical from the label on the radiopharmaceutical container, identify, and cross-check with the radiopharmaceutical accountability log/software, the following:
i.   concentration at assay time/date
ii.   specific activity
iii.   lot number
iv.   assay time
v.   assay date
vi.   total activity
vii.   total volume

b.   determine the actual elapsed time between assay calibration and required dose calculation time

c.   calculate the activity remaining using the appropriate decay factor (pre or post) for the time elapsed and the appropriate equation

d.   calculate the activity needed for the procedure

e.   determine the volume of the radiopharmaceutical required for the patient dose

3. Demonstrate concern for accuracy by consistently double-checking:

a.   radiopharmaceutical dose calculation

b.   radiopharmaceutical dose withdrawal

c.   labels on all radiopharmaceutical vials

4. Demonstrate the correct methods for dispensing a liquid radiopharmaceutical, to include:

a.   use of aseptic technique throughout the procedure

b.   use of gloves to minimize self-contamination problems

c.   drawing up the radiopharmaceutical behind a lead shield to within +/- 0.5 calibrated unit on the syringe, of the volume identified in the initial calculation

d.   verification of the radioactive dose using the dose calibrator

e.   recording patient name, examination, activity, volume, lot number, time, and date into the radiopharmaceutical accountability records for that radiopharmaceutical

f.   labeling the syringe of radioactivity with the patient's name, radiopharmaceutical, and dose within the syringe

g.   placement of readied dose inside a syringe shield on an injection tray for administration

5. Demonstrate the correct method for calculating doses, dispensing, and administering capsules of radioactivity, to include:

a.   verifying patient name, study requested, age, and dose range to be given

b.   from the label on the container, identify the following:

i.   activity per capsule at assay time/date

ii.   specific activity

iii.   lot number

iv.   assay time

v.   assay date

vi.   total number of capsules

vii.   total activity

c.   determining the actual time elapsed between assay calibration and required dose calculation time

d.   calculating the activity remaining in each capsule, using the appropriate decay factor (pre or post) for the time elapsed, and the appropriate equation

e.   calculating the activity needed for the procedure

f.   determining the number of capsules to be used for the patient dose

g.   setting aside an equivalent number of capsules to be used as a standard, as appropriate

h.   dispensing capsule(s) to patient with a glass of water, for oral administration

6. In the clinical setting, demonstrate an appreciation for radiation safety procedures by consistently:

a.   wearing gloves when preparing and administering radioactivity

b.   logging in all radiopharmaceutical doses

c.   administering all doses to within +/- 10% of the original calculated dose

d.   correctly disposing of all materials used in dose administration

7. Administering no higher than the accepted maximum dose level of a radiopharmaceutical.
8. Uses correct medical asepsis techniques during venipuncture procedures.

Tc-99m Labeling:
Student will be able to:
1. For each of the radiopharmaceuticals (sulfur colloid, microspheres of MAA, phosphates/phosphonates, DTPA, glucoheptonate, DMSA, biliary agents, etc.) correctly compound the radiopharmaceutical using a kit and Tc-99m pertechnetate, to include:
a. determination of the amount and volume of radioactivity to be added to the kit, with special attention to any limitation for level of activity or volume
b. recording radioactive dose and volume used in log under daily elution for Tc-99m pertechnetate
c. preparing the radiopharmaceutical with strict adherence to manufacturer's discretion on heating, sequence of additions, and mixing
d. checking total activity in radiopharmaceutical vial with dose calibrator
e. calculating and recording the concentration of radioactivity of the compound, time and date of preparation, total activity, and volume
f. labeling the vial with time and date of preparation, lot number, radiopharmaceutical form, concentration, and total volume
2. For each radiopharmaceutical prepared, check for proper pH, color, clarity, and particle size, as appropriate. Record results.
3. Given radiopharmaceutical QC data, determine whether the material can be used, or if preparation must be repeated.
4. Given an imaging procedure that demonstrates a radiopharmaceutical biological distribution different than expected, evaluate all data available to determine the probable cause for such distribution.
5. Perform chromatography for the determination of radiochemical purity, to include:
a. assembly of all materials for the procedure
b. expediency in performing all tasks due to great instability of some radiopharmaceuticals
c. correct inoculation technique
d. adherence to specified department protocol throughout the procedure
e. appropriate separation of finished chromatogram to allow for accurate determination of various forms of Tc-99m
f. appropriate use of counting instrumentation in the determination of percent free, percent hydrolyzed, and percent bound
g. recording of data for each radiopharmaceutical

Senior Students at Primary Level:
At this level the student should perform routine clinical procedures without instructional assistance, but under supervision. The student must maintain competency in all previous levels while striving to complete competencies and obtain the status of an entry –level technologist.
The student will attend clinical practicum 24 hours per week during the fall and spring semester, and 40 hours per week during winter intersession and summer internships. The student will follow their given clinical rotation schedule.

Goals for Senior Fall, Winter & Spring Semesters:

<u>Instrumentation</u>: <u>Scintillation Cameras</u>: Student will be able to:

1. For a given scintillation camera, perform and analyze the following quality control procedures:
a.   sensitivity check
b.   center of rotation
c.   pixel calibration
d.   high count uniformity correction.
2. Given an imaging examination using the scintillation camera, recognize imaging artifacts that reflect malfunctioning, or incorrectly adjusted instrument (this will include artifacts attributable to inappropriately peaked pulse-height analyzer-PHA), damaged scintillation crystal, or malfunctioning photomultiplier (PM) tubes, incorrect COR.

<u>Instrumentation- PET/CT</u>:
Student will be able to:
1. For a given PET or PET component of PET/CT imaging system, perform and analyze the following quality control procedures:
a.   reference scan
b.   energy window calibration
c.   gain setting
d.   coincidence timing window
e.   normalization
f.   absolute activity calibration
2. For a CT component of PET/CT imaging system, perform and analyze the following quality control procedures:
a.   calibration
b.   filed uniformity
c.   water phantom
d.   tube warm-up
e.   air calibration
f.   water phantom checks of slice thickness, accuracy and positioning.
3. Given an imaging examination using the PET/CT scanner, recognize imaging artifacts that reflect a malfunctioning/incorrectly adjusted instrument, misregistration of images or incorrect attenuation correction.

<u>Scintillation Counters</u>:
Student will be able to:
1. As appropriate, perform and record energy linearity check and volumetric calibration on a scintillation counter. To be acceptable, evaluate these results with respect to the performance indicated by the data and expected impact on routine studies, using the scintillation counter.
2. Given a procedure that requires the use of a scintillation counter consistently follow departmental protocol when performing the study.
3. Given a scintillation counter, periodically conduct and record chi-square evaluation, and analyze these results for acceptable instrument performance.
4. Given a procedure that requires the use of a scintillation counter with well detector or probe, demonstrate an appreciation for the statistics of counting and decay by counting a minimum of 10,000 counts for each sample.

5. Given a procedure that requires the use of a scintillation counter with well detector or probe, demonstrate an appreciation of geometry in counting, by maintaining exact geometry from one count to another and/or using aliquots and correction factors appropriate for large volumes.
6. Given a procedure that requires the use of a scintillation detector and recorder, demonstrate an appreciation for the instruments functioning capabilities by never using a source with a count rate exceeding the limitations of dead time response.

Gas-Filled Detectors:
Student will be able to:
1. Given a G-M survey meter, periodically:
a.   calibrate it according to Nuclear Regulatory Commission (NRC) specifications
b.   perform a reference check-source test
c.   compare results with those previously obtained
d.   maintain records of calibration and testing for each G-M survey meter
e.   change batteries as appropriate for continued function
2. Given a dose calibrator, periodically:
a.   determine linearity of response over entire range of radionuclide activity to be measured
b.   test for significant geometrical variation in activity measured as a function of sample volumes or configuration, and determine correction factors as necessary
c.   test the accuracy for commonly used radionuclides that have adequate reference standards available
d.   check for constancy by using a long-lived radionuclide standard
e.   evaluate results from these tests by comparison with previously obtained results, and request service if necessary
f.   maintain records for each of the above tests
3. Given a scintillation or gas detector, demonstrate an appreciation for the effect of instrument contamination by identifying such contamination in floods, hot spots, or background counting.
4. Given a contaminated detector, demonstrate an appreciation for the effect of contamination and function of the instrument by correctly decontaminating the instrument.
5. Given a survey meter, demonstrate an understanding of its function by using an appropriate count/dose range for the survey.
6. Given a dose calibrator, demonstrate an appreciation of the function of the instrument by always using parameters appropriate for the energy and activity level of the radionuclide used.

Decontamination Procedures:
1. Given a contaminated surface or area in the department, demonstrate correct de-contamination procedures, to include:
a.   reduction of access to area and confining the spill as indicated
b.   use of protective clothing, as appropriate
c.   removal and/or decontamination of non-disposable articles
d.   storage of contaminated articles, as appropriate
e.   decontamination or reduction of activity to acceptable levels on immovable materials or equipment including porous or nonporous areas, repeating as necessary
f.   record cleanup and final survey results after decontamination

2. Given a situation in which the student is personally contaminated (clothing and/or body surface), demonstrate correct decontamination procedures, to include:
a. removal and storage of contaminated clothing
b. correct washing of contaminated body surface until level of activity is acceptable

Radioactive Waste Disposal:

Student will be able to:
1. Monitor the stored radioactive materials, including generators, routinely, to determine if the level of activity is acceptable for discarding. This will include routine hospital waste disposal of non-radioactive waste, as well as radioactive waste disposal through a particular contracted agency.
2. Decontaminating and/or reorganizing storage areas as appropriate.

In Vivo Imaging Procedures:

Student will be able to:
1. When given a routine imaging requisition, prepare patient with pre-medications and instruct patient as to any particular preparation necessary for the imaging procedure.
2. Analyze patient information to determine contraindications, interfering medications and potential adverse reactions prior to administration of radiopharmaceuticals, pharmaceuticals and contrast media.
3. Demonstrate correct computer processing and analysis of SPECT, PET/CT or any quantitative study.
4. Archive acquired data on picture archival communicating system (PACS).

Dose Calculation and Administration:

Student will be able to:
1. Given a procedure that requires the intravenous administration of radioactive material, demonstrate the correct method of administration for that radiopharmaceutical, to include:
a. assembling injection tray with all necessary materials for venipuncture, including shielded syringe of radioactive material and gloves
b. positioning of patient appropriate for the study to be performed and/or radiopharmaceutical to be injected
c. select a suitable vein and attach tourniquet
d. select a suitable needle or angiocatheter
e. communicate with and reassure patient, as appropriate
f. using aseptic technique throughout procedure
g. perform the venipuncture and administer the dose
h. observing patient for reactions/extravasation
i. disposing of waste in appropriate radioactive waste or non-radioactive waste containers

Radiation Safety and Protection:

Student will be able to:
1. Perform periodic leak test on sealed sources, as appropriate.
2. Use proper radiation protection procedures when handling PET radiotracers.
3. Use proper radiation safety methods when performing PET/CT procedures.

Administrative/Management Functions:

Student will be able to:
1. Participate in the maintenance and updating (as necessary) of the department procedure manual.
2. Participate in the department Quality Control and Quality Assurance Programs.

3. In Vitro Testing: Operation and QC of Laboratory Equipment

Student will be able to:
1. Identify and use correctly: glassware; pipettes; centrifuges; water baths; pH meters; laboratory scales and balances; vortex mixers; shakers; and, counting equipment (single sample and automated).
2. Balance centrifuges, when used.
3. Calibrate pH meters, scales, and balances.
4. Monitor and record refrigeration temperatures. Sample Collection and Preparation:

Student will be able to:
1. Review requisitions to determine volume of sample needed, type of sample needed, and anticoagulant that should be used (where applicable).
2. Identify procedures where special collecting techniques and/or time factors must be observed.
3. Proficiently interact with patient to explain procedure and perform venipuncture.
4. Properly label blood sample with patient name, number, and other identifying data according to department protocol.
5. Correctly dispose of waste materials using universal precautions.
6. Separate and prepare samples for assay.
7. Store samples according to protocol if assays are not to be done promptly.

 Radionuclide Therapy Procedures:

Students must not take responsibility for administration of therapeutic quantities of radiopharmaceuticals at any time during their tenure as a student. However, it is vitally important that students observe and assist with the administration of therapeutic doses in accordance with departmental policy.
The student will be able to:
1. Determine the purpose for the therapeutic procedure from the requisition and/or the patient's chart.
2. Inspect all paperwork including informed consent and written directive.
3. Consult with the nuclear medicine physician regarding the procedure and appropriate dosage.
4. Correctly identify the patient according to the quality management program of the institution.
5. Review pertinent lab reports such as pregnancy test results.
6. Determine whether the patient is to be hospitalized, and if so, consult with the hospital staff and radiation safety officer about room preparation and staff training.
7. Calculate the amount of radiopharmaceutical to be administered and assemble all materials for administration.
8. Authorized user to verify the correct radiopharmaceutical and the dosage.
9. Assist the authorized user to supply proper patient care instructions and the radiation safety aspects of the procedure to the patient and/or the patient's family or hospital staff, and be sure all questions have been answered.

10. Observe administration of the therapeutic dose to the patient.
11. Dispose of and store all radioactive waste according to departmental protocol.
12. Monitor administration area to ensure there is no contamination and document radiation surveys of designated patient areas when indicated.
13. When a patient is hospitalized, monitor the patient and the room according to department protocol to determine when the patient can be released, and when the room can be occupied by another patient.
14. Perform thyroid bioassays on personnel who have assisted with administration of therapeutic Iodine-131 according to department protocol.

CLINICAL ROTATION EVALUATIONS

Students must complete objectives and fulfill competencies in accordance with the syllabi and clinical evaluation system. Students will be evaluated on a regularly scheduled basis by the primary evaluator in his or her assigned clinical area using the online clinical evaluation system. The purpose of the evaluation is to assess the student's clinical knowledge, problem solving, technical and behavioral skills.

The evaluation is reviewed by the clinical coordinator, who may in turn review it with the student to assure understanding and to offer direction to improve areas of deficiency.

All evaluations are saved in the online clinical documentation system. Students can access and review their clinical evaluations and records at any time.

A student who fails to meet the required objectives or competencies at the end of term/semester will receive a grade of F for the clinical which may result in immediate dismissal from the Program.

A student who fails 2 or more clinical rotation evaluations in a semester or summer session will result in program dismissal and receive a grade of F for clinical. A student who fails the clinical rotation evaluation during winter intersession will result in program dismissal and receive a grade of F for clinical.

Utilizing the Evaluation System:
1. The End of Rotation Evaluation forms contain general and specific task objectives that are used to assess the student's progress in the clinical area (see Appendix I).
2. On the last day of each evaluation period the student is evaluated according to the expected clinical performance objectives. However, technologists and GCC faculty/clinical instructors have the right to complete a clinical evaluation at any time.
3. During Fresh/Fall and Fresh/Spring semesters there will be one (1) End of Rotation Evaluation (EOR) completed for every 2-week rotation (4 clinical days).
4. During Senior/Fall and Senior/Spring semesters there will be one (1) End of Rotation Evaluation (EOR) completed for every 1-week rotation (3 clinical days).
5. During Winter Intersessions and Summer Internships, clinical evaluation forms are completed once a week for each week (5 days) completed.
6. These evaluations may be discussed with the student pointing out strengths as well as weaknesses. Failed objectives are documented.
7. Clinical Education Plans are created for students who need to improve on specific objectives (see Appendix K). These plans are forwarded to the AES who will be working with the student at the clinical affiliates.
8. Evaluations are a percentage of the overall clinical grade (see clinical syllabi for percentage).

The clinical task objectives are to be scored as follows on the End of Rotation Evaluations: Y= yes, the student has consistently and without any deviation met the objective.

U= needs improvement for current level (or semester). The technologist needs to note the deviation(s) and the area(s) the student needs to improve on.

N= no, the student has not met or has deviated from the objective. The technologist needs to note the deviation(s) and the area(s) the student needs to improve in.

N/A= not applicable at this time.

2 or more N's in any combination of the following sections of the Student Evaluation will result in a Failure (zero): Patient Care, Equipment and Procedure Protocol, Radiation Safety, Safety, Student Professionalism, Fusion Imaging.

1 or more N's in the Pharmacy Assessment section of the Student Evaluation will result in a Failure (zero).

Clinical Grade:

While in the clinical setting the student must successfully complete and document all performance objectives prior to the last day of the semester to earn a passing grade.

To remain eligible for continuance of clinical studies, students must show progressive advancement of skills. As this is a competency-based program, the student must master and maintain all past performance objectives through to the final rotation.

METHOD OF COMPETENCY

Students are expected to master and document competency in the procedures identified on the NMT Program Procedure Checklist (see Appendix K). The student is responsible to reinforce the material presented in classroom lecture and labs through active participation in the clinical setting. Once a student has documented thorough knowledge of a procedure, he/she must demonstrate that knowledge to a qualified clinical instructor/evaluator. The instructor evaluates the student's ability according to the Program's criteria for performance evaluation. The competency evaluation is completed and saved in the online documentation system.

The student must complete a student intent form when assigned to an affiliate during the following semesters: Clinical Practicum I, Winter Clinical Internship I, Clinical Practicum II, and 2 intent forms will be required during Summer Clinical Internship II (see Trajecsys: Clinical Documentation System for each individual form). This form must be completed during the first week of the rotation. The intent form identifies at least 3 objectives to be completed by the end of the rotation at the affiliate. See syllabi and Trajecsys for due dates and intent form details.

The AES will assign the student to the appropriate area(s).

The student must complete assigned clinical checklists, processing competencies and quality control procedures. See syllabi and Trajecsys for due dates and details. The clinical check lists, processing competencies and quality control procedures are graded on a pass/fail basis. Students must pass the assigned clinical checklists, processing competencies and quality control procedures to successfully complete each clinical practicum or internship.

During Clinical Practicum IV all published and defined Program clinical goals must be mastered and maintained. Upon completion of the practicum, documentation of successful completion of all Program objectives and competencies will qualify a student for an exit competency evaluation.

The successful completion of the final evaluation will establish that the student has met all the clinical requirements for the Program.

At the discretion of the Program Director, any student who does not maintain competency on any task objective(s) through the last rotation shall extend their clinical education. The student cannot exit the Program until such time that all stated performance objectives and competencies are met to the satisfaction of the Program Director.

Students will perform competencies according to the guidelines for each semester, and are responsible to complete the appropriate number of competencies for Program completion.

Total = 26: 17 mandatory, 8 elective, 1 Exit Competency
Semester: *Number of competencies needed for the semester
Summer/Freshman (NMT126)   10

   Fall/Senior (NMT211)   8

   Spring/Senior (NMT212)   7   and 1 Exit Competency

*Candidates must successfully complete the above number of competencies to graduate from the Nuclear Medicine Program. The following skills must be mastered to pass the procedures; patient instructions, preparation and care, selection, handling, and administration of radiopharmaceutical, equipment configuration and patient positioning, radiation safety, and image processing and evaluation (this list is not all inclusive). All procedures must be performed on patients, with the exception of therapies which may be simulated.

Students are allowed to begin injecting as of June 1st (if they have successfully completed the venipuncture training at the College and affiliate requirements). Between June 1st and August 1st the student is expected to administer the radiopharmaceutical at the discretion of the supervising technologist in order to successfully pass a competency. The lung perfusion and 3-phase bone scan competencies cannot be attempted until August 1st. By August 1st, every student must perform the radiopharmaceutical administration in order to successfully pass any competency. A student must be performing the procedure at a primary level from start to finish in order to successfully pass a competency.

The ARRT requirements specify that certain clinical procedures may be simulated. Simulations must meet the following criteria: (a) the student is required to competently demonstrate skills as similar as circumstances permit to the cognitive, psychomotor, and affective skills required in the clinical setting; (b) the program director is confident that the skills required to competently perform the simulated task will generalize or transfer to the clinical setting.

The mandatory number of competencies must be successfully completed to continue in the Nuclear Medicine Technology Program.

STANDARDS GOVERNING COMPETENCY FORMS
1. To demonstrate clinical competence, the student must perform the scan independently, consistently, and effectively on a patient per the ARRT standards. A student who cannot appropriately complete the task will fail the competency.
2. The student who does not complete the required number of competencies for a particular semester (including summer session) will be dismissed from the NMT Program and will not be ineligible for readmission.

3. The student may begin achieving Senior Only competencies as of August 1st during Clinical Internship II (freshmen/summer). The student must successfully perform all aspects of the procedure to achieve a Senior Only competency (including, but not limited to, administration
of the radiopharmaceutical, processing, etc.).
4. Student must refer to competencies on an online clinical documentation system. Competency requirements and performance criteria for each competency are outlined on the Trajecsys online clinical documentation system (See Appendix L).
5. Prior to asking the technologist to attempt the competency, students must ensure that they have completed the appropriate number of studies at the specific participation level.
6. The student must ask the technologist to attempt the competency prior to the patient arrival.
7. The student must respect the decision of the technologist if he/she refuses to allow the student to attempt a competency.
8. Students must keep track of the department schedule for the competency they wish to attempt.
9. After an exam is complete, it is the student's responsibility to check Trajecsys online system to ensure the competency was entered by the technologist and that the student passed the competency.
10. The student is expected to keep track of competencies successfully completed by verifying on Trajecsys online system.
11. If the student does not pass a competency, the student can attempt to repeat the competency again when their skills have improved or at the discretion of the technologist. The student must complete appropriate number of competencies by the end of the semester.
12. The student is not allowed to go over the maximum number of competencies per semester or interval. There will be no exceptions.
13. Competencies are a pass/fail portion of the clinical grade and the required number of competencies per semester (including summer internships) must be successfully completed in order to pass the clinical course.
14. The student who does not complete the mandatory number of competencies will not be allowed to progress into the next term of their clinical training.
15. If for any reason the student is not completing the necessary number of competencies, it is the student's responsibility to notify the clinical coordinator and ask for assistance to complete competencies by required time frame.

SKILL SUMMARY SHEETS (Patient Log Sheets)

Daily Skill Summary Form: Students must keep a record of all procedures performed in the clinical setting and the level of participation when performing these procedures. Students are also required to document hours for PET/CT, CT and SPECT/CT procedures. Students who are assigned to a clinical affiliate that does not allow them to access the online clinical documentation system must enter their daily skill summary sheets (patient log sheets) from another computer by the end of each week. All students must keep a hard copy of their skill summary sheets at all times. The hard copies do not need to be submitted to the Clinical Coordinator, but the students must keep these as a verification to assist in solving any discrepancies between the online skill summary sheet and the hard copy.

The AES at each site will be approving the students' skill summary sheets online on a weekly basis.

To enter the procedure information on the Clinical Daily Skill Summary Sheet in online clinical documentation system:
- choose the study from the pull down menu
- select student's level of participation: 1 = observed

2 = partially assisted technologist 3 = assisted technologist

4 = performed with minimal assistance 5 = performed with indirect supervision

Absolutely no patient identifiers are to be included on the skill summary sheets (see Appendix M, Sample Daily Skill Summary Form).

Levels 1-4 participation is consistent for freshmen level students who need direct supervision.

Level 5 participation is the goal for each student beginning with Clinical Internship II (freshmen/summer). The student must be operating in level 5 status in order to begin working towards successful completion of his/her required competencies.

Clinical Notes: The student must also take notes for each room and each procedure he/she observes during freshmen year. The technologists will expect the student to be able to refer to his/her notes when the student returns to each room throughout his/her training. A clinical faculty or staff member will ask to see student's notes on a continuous basis. If the student does not comply with these procedures, a written warning will be issued.

All notes taken during clinical time are subject to review by the College and clinical affiliate staff, and should only be educational in nature. No personal information of any kind may be recorded by the student.

As agents of the College, the staff of the clinical affiliates has the right to review the student's evaluations, competencies, and clinical education plans at any time. The College faculty and staff have the right to discuss the student's progress with the staff at the clinical affiliates in support of the student's educational goals.

One CTO day will be deducted from the CTO balance, if a student does not have the clinical notes with all required documents, including the radiation badges, with him/her at the clinical affiliate or during clinical lab.

SUPERVISION STANDARDS
Direct Supervision - Student supervision under the following parameters:
- A qualified nuclear medicine technologist reviews the procedure in relation to the student's performance;
- A qualified nuclear medicine technologist evaluates the condition of the patient in relation to the student's knowledge;
- A qualified nuclear medicine technologist is present during the student's performance of the procedure;
- A qualified nuclear medicine technologist reviews and approves the procedure
- A qualified nuclear medicine technologist is present during student performance of any repeat of any unsatisfactory procedure.

Indirect Supervision:

Supervision provided by a qualified nuclear medicine technologist immediately available to assist students regardless of the level of student achievement. Immediately available is interpreted as the presence of a qualified nuclear medicine technologist adjacent to the room or

location where a nuclear medicine procedure is being performed. This availability applies to all areas where ionizing radiation and equipment is in use.

IMAGING/TREATMENT SIGN OFF

No student, regardless of competency level, will perform any diagnostic or treatment procedure without first reviewing the request with an ARRT/NMTCB certified staff technologist. No student will pass a radiograph/digital image or scan, complete a treatment without the written verification of an ARRT/NMTCB certified staff technologist. All radiographs, scans and treatments must be reviewed and initialed by the supervising technologist. **There are no exceptions**.

REPEAT POLICY

No student will repeat a radiograph or scan without the direct consultation, approval and supervision of an ARRT/NMTCB certified staff technologist. **There are no exceptions.**

CLINICAL PRACTICE REQUIREMENTS FOR NMT STUDENTS

A. Lines of Authority

Respect lines of authority, recognizing that reliable execution of the physician's orders for the patient is essential and a proper medical ethic. In the clinical setting, observe the appropriate line of authority with respect to clinical assignments and activities. The AES and technologist instructor are the immediate authority in the clinical setting. These individuals work with and under the guidance of the Program Director and Clinical Coordinator.

B. Treatment Decisions are made by Physicians

Diagnostic interpretation of imaging and/or the decision with respect to therapeutic radiation dosage and treatment parameters is always made by the physician. A student or technologist should make no diagnoses or interpretative diagnostic judgments to anyone under any circumstances unless his/her opinion is solicited by the physician. To do so is a serious breach of medical ethics and scope of practice, and also potentially compromising to the technologist from a medical/legal aspect.

C. Confidentiality

Students must never disclose any patient confidential information to anyone not directly involved in the care of the patient. Failure to respect this code constitutes a violation of affiliate site policy, violation of HIPAA, is professionally unacceptable, as well as potentially compromising from a medical/legal aspect. Students may not discuss the diagnosis or prognosis with the patient, family members, or family friends. However, once students are sufficiently informed through classroom instruction, they may explain protocols and diagnostic/therapeutic procedures with the patients. Initially such questions should be referred to a staff technologist.

D. Radiation Protection and Safety

It is the student's personal responsibility to practice all appropriate radiation protection procedures for his/herself, the patient, and other members of the health care team. This includes utilizing personnel radiation monitoring devices, observing rules such as utilization of equipment safety devices, protective shielding and clothing, safety precautions with respect to radioactive materials, measures for protection of nonmedical assisting personnel, and all other radiation protection measures.

In addition to radiation protection practices, observation of all appropriate general safety, fire regulations, and institutional regulations in effect for standard precautions should be considered part of the student's personal responsibility in delivering safe, competent patient care. It is the student's responsibility to know and understand these regulations.

E. Student Initiative

A student is not allowed to attempt a procedure on his/her own initiative if he/she has not received permission from the supervising technologist. Some behaviors that demonstrate initiative and a willingness to participate include:

- Student's attentiveness to those who are explaining procedures, case studies or other like situations to either the student or others in the vicinity.
- Asking questions pertinent to the clinical situation at the appropriate time.
- Recognizing and learning the major duties and responsibilities applicable to the student's assigned clinical area, followed by consistent performance of these duties without the need for a constant reminder.
- Recognizing when student's assistance is needed in an area other than the assigned area and recognizing when it is appropriate for a student to leave his/her assigned area to help others.

F. Following Orders

Proper professional conduct calls for the student to follow the instructions of the student's immediate supervisors. Do not hesitate to request clarification of any written or verbal order that the student does not understand. Questions, conflicts, and concerns which the student may have with respect to what is required of him/her in the clinical setting are never debatable at the time of a patient procedure in the presence of a patient. Should the student have concerns about clinical requirements at an affiliate site, such matters should be brought to the attention of the AES, Clinical Coordinator or Program Director in an orderly and professional manner, as soon as possible after the immediate patient care requirements have been met. See Section on Proscribed Conduct in the NMT Program Student Handbook in regards to disciplinary sanctions that will be applied due to insubordination.

G. Dependability/Accountability

Providing quality care depends on all members of the health care team knowing their role, responsibilities and scope of practice. The student is expected to arrive at the clinical site prior to the start time and give advance notice if it is unavoidable that he/she will be late or absent from class or clinic. Student is required to adhere to the attendance and the CTO procedures.

H. Accepting Critique/Limitations

Since the student will be in a learning capacity for some time, there is no need to feel hesitant about asking questions, seeking clarification, or advice and assistance at any time if it is necessary in regards to the clinical aspect of student's training. Also, constructive critical analysis of student's work and progress is an essential part of the educational process. The student will have the opportunity to comment freely and respond to the periodic evaluative reports completed by faculty and clinical instructors during meetings with the Clinical Coordinator and/or Program Director. The student is not allowed to challenge or confront the technologist evaluators in the clinical setting. **A student who confronts a technologist regarding his/her evaluation may be immediately dismissed from the Program.**

Medical Records

From an ethical and medical/legal standpoint, proper medical record notation and documentation is a fundamental responsibility and obligation of the student. Proper form, legibility, accuracy, correct terminology, avoidance of jargon and irrelevancy are required of all dorms of documentation.

I. Attitude towards Patients
A patient must feel that those participating in his/her medical care are competent, confident, and otherwise worthy of the trust placed in them. The impression that the student gives to the patient as to his/her level of professionalism is an important factor in engendering a feeling of confidence and trust. The successful completion of a procedure is dependent upon the patient having confidence in those he/she has entrusted to participate in his/her medical care. Student's ability to correctly being interpreted by the patient are important tasks. Behaviors which patients interpret as earmarks of professionalism may include:

- Inform the patient that you are fully aware of what is occurring. Explain each step of the procedure to the patient as you perform it.
- Maintain composure at all times. If you encounter a situation where you are not sure about what to do next, excuse yourself from the patient and ask for assistance in a manner which will not affect the patient's trust in you. However, do not leave the patient alone, make arrangements to have someone stay with the patient in your absence.

J. Communicating with Patients
Address the patient by name and introduce yourself and any other person participating in the procedure is a student's duty. With the possible exception of small children, patients are not to be called by their first names or familiar endearments. Use the prefix Mr., Mrs., Ms., etc. and the patient's last name.
The patient should always be treated courteously and in a manner consistent with his or her age. Further, it is the patient's right to have the procedure explained in a manner that is understandable, and to know what is expected of him or her. Provide for maximum privacy, comfort, and safety for the patient and his/her belongings.
Patients frequently need to talk, and it is entirely appropriate for the student to be an empathetic and encouraging listener. It is unacceptable professional conduct to engage in gossip about other institutions or medical personnel.
The student should not discuss details of patient's diagnosis or treatment. In such instances, the student should inform the patient that he/she is not the doctor, and cannot assume that role.

K. Personal Appearance
Professional dress codes are designed to assure appropriate clothing for the work involved, as well as to project the necessary clean and professional image which is so valuable in building patient confidence.

L. Honesty and Integrity
Nothing characterizes the healthcare provider more completely than the trust that develops when taking care of other human beings. In the personal therapeutic relationship that exists between caregiver and client, practitioner and patient, there is no room for small, medium, or large dishonesties of mind, spirit, or substance. From being honest with oneself with respect to one's talents (and limitations), to the most exquisite honesty and care in making treatment records, or reporting events related to patient care, the onus is on the healthcare provider to be worthy of the trust placed in the caregiver, and to exemplify the quality of character such a profession demands. Nothing characterizes the healthcare provider more, or serves ones better in the professional live as the quality of honesty and integrity.

M. Additional Clinical Requirements:
1. Always ARRIVE ON TIME and be ready to begin assigned clinical training. The student needs to listen to traffic and weather reports in the morning, prior to arriving at the clinical site. The student is not allowed to start their shift early just so they can leave early for the day.

2.   The student must always notify the technologist with which he/she is working with, the AES AND the Clinical Coordinator when the student is going to be late, leave early or be absent.
It is not the Clinical Coordinator's responsibility to notify the clinical affiliate when the student has scheduled time-off. The student is responsible for reminding/notifying the clinical staff when he/she has a scheduled CTO day.
3.   The student must be a RELIABLE and DEPENDABLE. The student must be ready to begin work in the clinic immediately upon arrival.
4.   Purchase a date book/planner, and look ahead to the following week for required clinical dates. The student should put all of his/her clinical assignments, deadlines, exam dates, meeting dates, etc. in the date book/planner. The student is responsible for knowing where he/she has to be at all times. Missing the first day of a rotation is unacceptable.
5.   Check the schedule, set-up the room for the next procedure without being told, stock rooms (linens, supplies, etc.). Do anything that can make the day go smoother without being told. The student should not stop stocking rooms when he/she becomes more competent in other clinical tasks. Adequate supplies are an integral part of being able to run a room efficiently.
6.   The student is only allowed a half-hour for lunch. It doesn't matter if the technologists take an hour lunch. The student should still arrive back in the clinic a half-hour later from time when he/she left (if this is acceptable at the clinical affiliate-check with the AES). The student can prepare the rooms for the first patients after lunch, stock rooms, clean, etc.
7.   Do not leave personal items in the staff bathroom. The student should only use his/her locker (if a student is assigned one) to store personal items. Please remember that the AES have the combinations to the student's lockers. Do not use technologists' personal items.
8.   Do not socialize or congregate in the hallways.
9.   Do not congregate in the staff lounges if the technologists are having a meeting or eating lunch.
10.   The student is to clean up after him/her-self after eating in any of the staff lounges.
11.   Students are not to leave old, moldy lunches/containers in the staff refrigerator.
12.   The student should ask the technologists to teach him/her during slow times.
13.   Treat the clinical training as if it were a JOB!!!!
14.   Schedule doctor appointments, etc. at the very beginning, or the very end of the day, and notify the Clinical Coordinator well in advance. Try to make all appointments during the breaks on college days, evenings, or weekends if at all possible.
15.   The student should ALWAYS notify the technologist/AES if they leave the clinical area.
16.   The student must take notes for each room, and study them the night before beginning his/her next rotation in that room. It would also be helpful to study the chapters in the imaging procedure textbook which are pertinent to the room the student is assigned to the week before each rotation.
17.   If the student has trouble with a particular clinical task(s) that he/she know, he/she should have mastered already, the student should contact the Clinical Coordinator about tutoring or remediation.
18.   Constantly check the room's schedule because scans are added on all the time in nuclear medicine departments.
19.   The student should assist in other rooms if needed when his/her room is slow.
20.   DO NOT STUDY DURING CLINICAL TIME.

21. It is not permitted to read magazines or non-nuclear medicine materials during clinical.
22. Always be PREPARED for clinic.

STANDARDS GOVERNING THE USE OF THE ONLINE CLINICAL DOCUMENTATION SYSTEM

- Some clinical affiliates will allow students to access www.trajecsys.com in order to enter the times that they enter and exit the clinical site (time card).
- Students are only allowed to enter www.trajecsys.com at these sites. They are NOT allowed to use the Internet for any other purpose.
- Students who are assigned to a clinical affiliate that does not allow them to access the Internet must enter their entry and exit times from another computer by the end of each day. The AES at each site will be approving the students' time cards online on a weekly basis.
- Failing to enter clinical time daily can result in loss of CTO.
- All students should keep a hard copy of their time card in their clinical binder at all times. The hard copies do not need to be submitted to the Clinical Coordinator, but the students must keep these as verification to assist in the solving any discrepancies with the online timecard.
- All students must sign Agreement to Abide by Internet Use Procedures at Clinical Affiliate (see Appendix O) and submit it to the Clinical Coordinator before entering the clinical setting in the first semester of the NMT Program.
- Disciplinary sanctions may be applied if a student does not abide by this policy.
  Students will ONLY be able to access the Online Clinical Documentation System (Trajecsys) while they are active students in the NMT Program. Students are encouraged to copy their Trajecsys records prior to their graduation date or withdrawal from the NMT Program.

Student Instructions for using the Online Clinical Documentation System:

1. Go to http://trajecsys.com/
2. Click on **System Log In**
3. Enter your **Username** and **Password**
4. Click on **Change Password** during your initial log in to change it to a more secure password. Make sure you write it down somewhere!

Time Card:

- Click on **Clock in/out** to clock in or out in "real-time" while at the clinical site.
- Choose your clinical site by clicking on the arrow to the right of the **Site** box.
- When you Clock In or Clock Out at the clinical site, the system will automatically log you out. If you need to get back in to work on your Daily Logsheet, you'll need to log in again.
- Click on **Clock In** or **Clock Out** as appropriate
a. If you are not allowed on the Internet at your clinical site, if you make a mistake, or you can't get to the computer to clock in/out:
 i. Click on **Time Exception**
 ii. Choose the appropriate clinical **Site**
iii. Click on the arrow to the right of the **Exception for** box, and choose **clock IN** or **clock OUT**, as appropriate
 iv. Enter the appropriate **Time** in or out using the 24 hour format without any spaces or colons (hhmm), for example: 1:00pm is 1300; 7:30am is 0730.
 v. Click in the box in front of the **Reason** you needed to use the Time Exception.
 vi. Enter an explanation if appropriate.
vii. Click **Submit**

Daily Logsheet:
- Click **Daily Logsheet** to begin entering procedures.
a. Choose your **Clinical Site**
b. Click on the arrow to the right of the **Major Study Area** to choose either Imaging, Simulation, Intent Form, Checklist, Radiopharmacy, etc.
c. Click on the arrow to the right of the **Skill** box to choose the specific procedure.
d. Click on the arrow to the right of the **Participation Level** box to choose the appropriate level of participation.
e. Click on the arrow to the right of the **Amount** box to choose the number of procedures that you performed that day at that participation level.
f. Click on the arrow to the right of the **Repeats** box to choose the number of procedures you had to repeat, if appropriate.
g. Select a **Date** by clicking on the little calendar icon to the right of the date box, and then clicking on the appropriate date.
i. If you are entering the procedures on the same day that you performed them, you will not have to change the date.
h. Click **Submit**

   Reporting Hours for PET/CT, CT and SPECT/CT Procedures:
- After logging into Trajecsys, choose '**Daily Logsheet**' on left-sided menu
- Where it says **Supervising Employee** choose from your list which of the 3 you are logging for the day
a. Click **Add Logsheet** button
b. Under **Major Study** choose **Computed Tomography**
c. Under **Skill** choose which of the 3 you are logging for the day
d. In the next pop-up choose your **participation level**
e. Enter **the amount of studies** performed that day
f. In the next pop-up enter the **amount of time** you spent performing the studies

   Example: You have performed 5 PET/CT scans with minimal assistance from the technologist in your 8 hours at the clinical site:
- **Supervising Employee**: PET/CT
- **Major Study**: Computed Tomography
- **Skill**: PET/CT
- **Participation Level**: Performed with minimal assistance
- **Amount**: 5
- **Time**: 8 hours*

**If you spend the whole clinical day performing just the studies with CT then you can log 8 hours. If you only perform a few SPECT/CTs while doing all general studies then try to estimate the time spent performing CT related studies (round up).

ENTERING TIME TOWARDS CT (SPECT/CT OR PET/CT) HOURS:

- A typical CT scan for SPECT/CT or PET/CT only takes 1 to 2 minutes
- The typical time for a SPECT/CT or PET/CT study is 20 to 30 minutes
- When entering CT (SPECT/CT or PET/CT) time you must enter it accurately.
- This means if you work in PET/CT for an 8-hour day there is no possible way you worked the CT portion for 8 hours, entering that will be considered falsification of time.
- I can allow you to enter the time the study took, example 20 to 30 minutes' maximum.
- In an 8-hour day then the maximum time you could possible perform CT would be approximately 4 to 5 hours IF you spent the entire day doing patients in the SPECT/CT or PET/CT room (and you did 8 to 10 studies that day).
- None of your days/time entered should be over the above time accumulation.
- Your Logsheet/skill summary should reflect how many patients in PET/CT you did to accumulate your hours.

Site Evaluation:

- **Site Evaluation**-at the end of each semester you will be asked to complete a site evaluation for each site that you attended. You simply click on **Site Evaluation**, choose the **Site**, click **Next**, choose the rotation ending **date**, complete the survey by clicking in the appropriate buttons: **Strongly Disagree, Disagree, Agree or Strongly Agree** and click **Submit**.

Reports:

- Click on **Reports** to see reports on your time, log sheets, evaluations, etc.

Competency Evaluations:

- Click on **Comp Evals** to see the objectives for each competency, checklist, student intent form, etc.

Don't forget to **Logout** when you're finished.

KEEPING YOUR OWN RECORDS

Students are strongly advised to keep a copy of their clinical evaluation reports and recorded hours, including CT hours for their personal records. This concept is recommended for verifying hours when original sheets are "lost" or misplaced and for reference when applying for board examinations and employment. Students will have access to the online clinical documentation only while they are active students in the NMT Program. Clinical records and evaluations cannot be removed from the college once they are submitted. Students are encouraged to print copies on a continuous basis, and are responsible for making the copies at their own expense.

Appendix A

NUCLEAR MEDICINE TECHNOLOGY PROGRAM OF STUDY: AS DEGREE

PROGRAM REQUIREMENTS

Freshman Year - (NOTE: **Required** orientation sessions will be scheduled during the summer before entry into the program.)

Fall Semester - (Practicum at affiliates Tuesday and Thursday, simulated labs are held in the NMT lab at the GCC campus and are scheduled on lecture days)

Course # Title	Credits
ENG* 101 Composition	3
MAT* 172 College Algebra	3
NMT* 101 Introduction to Nuclear Medicine	3
NMT* 102 Nuclear Medicine Procedures I	3
NMT* 111 Clinical Practicum I	1
PHY* 111 Physics for the Life Sciences	4
Total Semester Credit Hours	**17**

Winter Intersession – (Practicum at affiliates Monday through Friday, 40 hrs./week)

Course # Title	Credits
NMT* 113 Clinical Internship I	0.5
Total Semester Credit Hours	**0.5**

Freshman Year - Spring Semester - (Practicum at affiliates Tuesday and Thursday simulated labs are held in the NMT lab at the GCC campus and are scheduled on lecture days)

Course # Title	Credits
ENG* 102 Literature & Composition or ENG* 200 Advanced Composition	3
CHE* 111 Concepts of Chemistry	4
NMT* 112 Clinical Practicum II	1
NMT* 121 Physics in Nuclear Medicine	3
NMT* 201 Nuclear Medicine Procedures II	3
Total Semester Credit Hours	**14**

Summer Session - (Practicum at affiliates Monday through Friday, May through August, 40 hrs./week at clinical affiliates)

Course # Title	Credits
NMT* 126 Clinical Internship II	3
Total Semester Credit Hours	**3**

Sophomore Year - Fall Semester - (Practicum at affiliates Monday, Wednesday, and Friday, simulated labs are held in the NMT lab at the GCC campus and are scheduled on lecture days)

Course # Title	Credits
PSY* 111 General Psychology I	3
NMT* 211 Clinical Practicum III	2
NMT* 202 Nuclear Medicine Instrumentation	3
NMT* 203 Radiopharmacy	3
RST* 200 Cross Sectional Anatomy	3
Total Semester Credit Hours	**14**

Winter Intersession - (Practicum at affiliates Monday through Friday 40 hrs./week)

Course # Title	Credits
NMT* 216 Clinical Internship III	0.5
Total Semester Credit Hours	**0.5**

Sophomore Year - Spring Semester - (Practicum at affiliates Monday, Wednesday, and Friday, simulated labs are held in the NMT lab at the GCC campus and are scheduled on lecture days)

Course # Title	Credits
NMT* 212 Clinical Practicum IV	2
NMT* 221 Nuclear Medicine Procedures III	3
NMT* 222 Intro. to Computers and Nuclear Medicine Apps.	3
NMT* 223 Nuclear Medicine Seminar	3
Total Semester Credit Hours	**11**

Total Credit Hours 60

NUCLEAR MEDICINE TECHNOLOGY PROGRAM OF STUDY: CERTIFICATE

PROGRAM REQUIREMENTS

Freshman Year - Fall Semester - (Practicum at affiliates Tuesday and Thursday, simulated labs are held in the NMT lab at the GCC campus and are scheduled on lecture days)

Course # Title	Credits
NMT* 102 Nuclear Medicine Procedures I	3
NMT* 111 Clinical Practicum I	1
Total Semester Credit Hours	**4**

Freshman Year - Spring Semester – (Practicum at affiliates Tuesday and Thursday, simulated labs are held in the NMT lab at the GCC campus and are scheduled on lecture days)

Course # Title	Credits
NMT* 112 Clinical Practicum II	1
NMT* 121 Physics in Nuclear Medicine	3
NMT* 201 Nuclear Medicine Procedures II	3
Total Semester Credit Hours	**7**

Summer Session (Practicum at affiliates Monday through Friday, May through August, 40 hrs./week at clinical affiliates)

Course # Title	Credits
NMT* 126 Clinical Internship II	3
Total Semester Credit Hours	**3**

Sophomore Year - Fall Semester - (Practicum at affiliates Monday, Wednesday, and Friday, simulated labs are held in the NMT lab at the GCC campus and are scheduled on lecture days)

Course # Title	Credits
NMT* 202 Nuclear Medicine Instrumentation	3
NMT* 203 Radiopharmacy	3
NMT* 211 Clinical Practicum III	2
RST* 200 Cross Sectional Anatomy	3
Total Semester Credit Hours	**11**

Winter Intersession (Practicum at affiliates Monday through Friday, 40 hrs./week)

Course # Title	Credits
NMT* 216 Clinical Internship III	0.5
Total Semester Credit Hours	**0.5**

Sophomore Year - Spring Semester - (Practicum at affiliates Monday, Wednesday, and Friday, simulated labs are held in the NMT lab at the GCC campus and are scheduled on lecture days)

Course # Title	Credits	
NMT* 212 Clinical Practicum IV	2	
NMT* 221 Nuclear Medicine Procedures III	3	
NMT* 222 Intro. to Computers and Nuclear Medicine Apps.	3	
NMT* 223 Nuclear Medicine Seminar	3	
Total Semester Credit Hours	**11**	**Total Credit Hours 36.5**

Appendix B

SOCIETY OF NUCLEAR MEDICINE & MOLECULAR IMAGING, TECHNOLOGIST SECTION

CODE OF ETHICS for the Nuclear Medicine Technologist (6/2013)

Technologists qualified to perform nuclear medicine procedures are members of the health care profession and must strive as individuals and as a group to maintain the highest of ethical standards by adhering to the Nuclear Medicine Technologist Code of Ethics approved by the Society of Nuclear Medicine and Molecular Imaging Technologist Section (SNMMITS).

The principles of the Nuclear Medicine Technologist Code of Ethics as listed below are not laws, but standards of conduct to be used as ethical guidelines by nuclear medicine technologists.

Principle 1:   The nuclear medicine technologist will provide services with compassion and respect for the dignity of the individual and with the intent to provide the highest quality of patient care.

Principle 2:   The nuclear medicine technologist will provide care without discrimination regarding the nature of the illness or disease, gender, race, religion, sexual preference, or socioeconomic status of the patient.

Principle 3:   The nuclear medicine technologist will maintain strict patient confidentiality in accordance with state and federal regulations.

Principle 4:   The nuclear medicine technologist will comply with the laws, regulations, and policies governing the practice of nuclear medicine.

Principle 5:   The nuclear medicine technologist will continually strive to improve his or her knowledge and technical skills.

Principle 6:   The nuclear medicine technologist will not engage in fraud, deception, or criminal activities.

Principle 7:   The nuclear medicine technologist will be an advocate for his or her profession.

Appendix C

AMERICAN SOCIETY OF RADIOLOGIC TECHNOLOGISTS and
The American Registry of Radiologic Technologists

CODE OF ETHICS   (2012)

1.   The radiologic technologist acts in a professional manner, responds to patient needs and supports colleagues and associates in providing quality patient care.

2.   The radiologic technologist acts to advance the principle objective of the profession to provide services to humanity with full respect for the dignity of mankind.

3.   The radiologic technologist delivers patient care and service unrestricted by concerns of personal attributes or the nature of the disease or illness, and without discrimination on the basis of sex, race, creed, religion or socio-economic status.

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

5.   The radiologic technologist assesses situations; exercises care, discretion, and judgment; assumes responsibility for professional decisions; and acts in the best interest of the patient.

6.   The radiologic technologist acts as an agent through observation and communication to obtain pertinent information for the physician to aid in the diagnosis and treatment of the patient and recognizes that interpretation and diagnosis are outside the scope of practice for the profession.

7.   The radiologic technologist uses equipment and accessories, employs techniques and procedures, performs services in accordance with an accepted standard of practice and demonstrates expertise in minimizing radiation exposure to the patient, self, and other members of the health care team.

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

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

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

Appendix D

AMERICAL HOSPITAL ASSOCIATION
THE PATIENT CARE PARTNERSHIP: UNDERSTANDING EXPECTATIONS, RIGHTS AND RESPONSIBILITIES (2003)

This document replaced the "Patient's Bill of Rights" in 2003, and is distributed to patients in the form of an easy to read brochure.

1.   <u>High quality hospital care</u>. Our first priority is to provide you with the care you need, when you need it, with skill, compassion and respect. Tell your caregivers if you have concerns about your care or if you have pain. You have the right to know the identity of doctors, nurses and others involved in your care, and you have the right to know when they are students, residents or other trainees.

2. <u>A clean and safe environment</u>. Our hospital works hard to keep you safe. We use special policies and procedures to avoid mistakes in your care and keep you free from abuse and neglect. If anything unexpected and significant happens during your hospital stay, you will be told what happened, and any resulting changes in your care will be discussed with you.

3. <u>Involvement in your care</u>. You and your doctor often make decisions about your care before you go to the hospital. Other times, especially in emergencies, those decisions are made during your hospital stay. When decision-making takes place, it should include:

a. **Discussing your medical condition and information about medically appropriate treatment choices.** To make informed decisions with your doctor, you need to understand:

i. The benefits and risks of each treatment.

ii. Whether your treatment is experimental or part of a research study.

iii. What you can reasonably expect from your treatment and any long- term effects it might have on your quality of life.

iv. What you and your family will need to do after you leave the hospital.

v. The financial consequences of using uncovered services or out-of- network providers.

vi. Please tell your caregivers if you need more information about treatment choices.

b. **Discussing your treatment plan.** When you enter the hospital, you sign a general consent to treatment. In some cases, such as surgery or experimental treatment, you may be asked confirm in writing that you understand what is planned and agree to it.

c. This process protects your right to consent to or refuse a treatment. Your doctor will explain the medical consequences of refusing recommended treatment. It also protects your right to decide if you want to participate in a research study.

d. **Getting information from you.** Your caregivers need complete and correct information about your health and coverage so that they can make good decisions about your care. That includes:

i. Past illnesses, surgeries or hospital stays.

ii. Past allergic reactions.

iii. Any medicines or dietary supplements (such as vitamins and herbs) that you are taking.

iv. Any network or admission requirements under your health plan.

e. **Understanding your health care goals and values.** You may have health care goals and values or spiritual beliefs that are important to your well-being. They will be taken into account as much as possible throughout your hospital stay. Make sure your doctor, your family and your care team know your wishes.

f. **Understanding who should make decisions when you cannot.** If you have signed a health care power of attorney stating who should speak for you if you become unable to make health care decisions for yourself, or a "living will" or "advance directive" that states your wishes about end-of-life care; give copies to your doctor, your family and your care team. If you or your family need help making difficult decisions, counselors, chaplains and others are available to help.

4. <u>Protection of your privacy</u>. We respect the confidentiality of your relationship with your doctor and other caregivers, and the sensitive information about your health and health care that are part of that relationship. State and federal laws and hospital operating policies protect the privacy of your medical information. You will receive a Notice of Privacy Practices that describes the ways that we use, disclose and safeguard patient information and that explains how you can obtain a copy of information from our records about your care.

5. <u>Preparing you and your family for when you leave the hospital</u>. Your doctor works with hospital staff and professionals in your community. You and your family also play an important role in your care. The success of your treatment often depends on your efforts to follow medication, diet and therapy plans. Your family may need to help care for you at home. You can expect us to help you identify sources of follow-up care and to let you know if our hospital has a financial interest in any referrals. As long as you agree that we can share information about your care with them, we will coordinate our activities with your caregivers outside the hospital. You can also expect to receive information and, where possible, training about the self-care you will need when you go home.

6. <u>Help with your bill and filing insurance claims</u>. Our staff will file claims for you with health care insurers or other programs such as Medicare and Medicaid. They will also help your doctor with needed documentation. Hospital bills and insurance coverage are often confusing. If you have questions about your bill, contact our business office. If you need help understanding your insurance coverage or health plan, start with your insurance company or health benefits manager. If you do not have health coverage, we will try to help you and your family find financial help or make other arrangements. We need your help with collecting needed information and other requirements to obtain coverage or assistance.

Appendix E

NUCLEAR MEDICINE TECHNOLOGY PROGRAM TECHNICAL STANDARDS

The Gateway Community College Nuclear Medicine Technology Program has established technical standards that must be met by each student admitted into the Program. Each student must be able to:

- Operate nuclear medicine equipment which will include lifting, pushing and reaching.

- Verbally communicate in a clear and concise manner while operating equipment, positioning patients, and performing other duties as assigned.

- Read and apply appropriate instructions in treatment charts, procedure requisitions, treatment prescriptions, notes and records.

- Lift a minimum of forty (40) pounds of weight, (shields, collimators, imaging receptors and ancillary aids used for patient procedures), up and overhead the level of the head.

- Move a patient and equipment into accurate positions to insure proper exposure/treatment.

- Move immobile patients from stretcher to treatment table with assistance from departmental personnel.

- Understand and apply clinical instructions given.

- Enter clinical data into computer system for specified procedures.

- Monitor patients during nuclear medicine procedures.

- Monitor audio and video equipment during nuclear medicine procedures.

- Monitor equipment and background sounds during equipment operations.

- Complete all required competencies in a manner that demonstrates accuracy, consistency and retention of learned skills and information.

Appendix F

DECLARATION OF PREGNANCY

Student Data:

Name:	
Established Conception Date:	
Established Delivery Date:	
Department:	
Department Mail Address:	

Declaration Date:	
Film Badge #:	
Phone – Work:	
Home:	

Supervisor: _____ Phone: _____

Radiation History Review:

Radiation Sources:	Dx X-ray:	Nuclear Medicine:
Rx X-ray:		Sealed Sources:
Other?:		

	Min. (mRem)	Avg. (mRem)	Max. (mRem)	
Monthly:				Based on: Individual records
Quarterly:				Group
Annually:				

Fetal Dose Pre-Declaration			Fetal Dose Post-Declaration	
	Month/Year	mRem	Month/Year	mRem
1			1	
2			2	
3			3	
4			4	
5			5	
6			6	
7			7	
8			8	
9			9	
	Total Before:		Total After:	

Recommendation: _____
_____
_____
_____

Declaration of Pregnancy:

Student Signature:		RSO Signature	
Date:		Date:	

Appendix G

ATTENDANCE AND PUNCTUALITY EVALUATION FORM
FOR CLINICAL PRACTICA I-IV AND CLINICAL INTERNSHIPS I-III

NUCLEAR MEDICINE TECHNOLOGY PROGRAM

Attendance and Punctuality Evaluation Form for Clinical Practica I-IV and Clinical Internships I-III

Student Name: Semester: Yr.:

Clinical Practicum: I   II   III   IV   Clinical Internship: I   II   III

The following objectives are graded on a Pass/Fail basis. If a student fails one of the objectives, he/she will receive a 0 (zero) for the attendance and punctuality portion of the Clinical Practicum grade.

P   F   1. Meets Program attendance and punctuality requirements to insure proper clinical training and consideration to patients and co-workers.

P   F   2. Incurs no more than 2 absences during the fall or spring semester, 3 during the summer internship and 1 during the winter internships.

P   F   3. Lateness of more than 2 incidents in one semester.

P   F   4. Provides notification for absences or tardiness in accordance with established Program guidelines and practices with no more than 2 variances per semester or internship, as noted by the clinical faculty and/or Program Director.

P   F   5. Requests time off in accordance with established procedures with no more than 2 variances in a semester or internship, as noted by the Clinical Coordinator and/or Program Director.

Appendix H

CTO FORM

NUCLEAR MEDICINE TECNOLOGY PROGRAM

Request for CTO Hours

Today's Date:

Student's Name:

Clinical Affiliate:

Time off Date:

*Four (4) or Eight (8) Hours:
*CTO may only be scheduled in four (4) or eight (8) hour segments.

Requested within 48 hours: _____

Approved:

_____

Clinical Coordinator

Form must be filled out and handed in at least 2 days prior to request date unless otherwise specified. Scheduled time is verified with the Clinical Coordinator prior to the time off. **The student must notify the Clinical Coordinator and the Affiliate Educational Supervisor (AES) of all CTO time.**

	N	U	Y	N/A	
Contacts appropriate personnel as needed.	N	U	Y⦿	N/A	
Dismisses patients properly with escorting & calling transport.	N	U	Y	N/A	
Examines and questions patients in order to remove attenuating objects, and completes pertinent patient history.	N	U	Y⦿	N/A	
Explains procedures appropriately to patients.	N	U	Y	N/A	
Identifies patient correctly & reviews requisition for pertinent information.	N	U	Y	N/A	
Maintains patient confidentiality and complies with HIPAA regulations.	N	U	Y	N/A	
Maintains patient dignity and comfort.	N	U	Y⦿	N/A	
Maintains patient safety at all times.	N	U	Y	N/A	
Prepares patients and room for next exam according to protocol.	N	U	Y	N/A	
Responds to patients questions & needs appropriately.	N	U	Y⦿	N/A	

Equipment and Procedure Protocol

	N	U	Y	N/A	
Answers telephone, responds to inquiries, and greets visitors in department.	N	U	Y	N/A	
Can perform multiple task as necessary. (Summer Freshmen)	N	U	Y⦿	N/A	
Completes all assigned work.	N	U	Y	N/A	
Completes all the necessary paperwork, & properly presents cases to physician.	N	U	Y⦿	N/A	
Performs appropriate view for procedure and can change existing protocols as needed.	N	U	Y	N/A	

(Summer Freshmen)

Performs computer analysis accurately. (Summer Freshmen)

N U Y N/A

Performs the study in a timely manner, keeping the room on schedule. (Summer Freshmen)

N U Y N/A

Places camera as close as possible and can perform extra views.

N U Y N/A

Positions patients and camera correctly.

N U Y N/A

Prepares camera/probe set-up for acquisitions, & performs computer set-up for acquisitions.

N U Y N/A

Prepares, assays, & administers dose safely and correctly. (Summer Freshmen)

N U Y N/A

Responds effectively to interruptions & prioritizes schedule. (Summer Freshmen)

N U Y N/A

Radiation Safety

Disposes of radioactive materials properly.

N U Y N/A

Follows ALARA guidelines.

N U Y N/A

Handles radioactivity safely.

N U Y N/A

Wears and removes gloves appropriately.　　N　U　Y　N/A

Wears lab coat and uniform per program guidelines.　　N　U　Y　N/A

Wears whole body and ring badges properly.　　N　U　Y　N/A

Safety

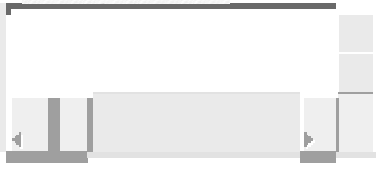Handles and disposes of needles properly.　　N　U　Y　N/A

Maintains a clean and orderly work area.　　N　U　Y　N/A

Operates the camera & all equipment in a safe manner.　　N　U　Y　N/A

Practices an acceptable level of personal hygiene.

N	U	Y	N/A
○	○	◉	○

Practices standard precautions.

N	U	Y	N/A
○	○	◉	○

Uses proper body mechanics.

N	U	Y	N/A
○	○	◉	○

Student Professionalism

Accepts responsibility for his/her actions and admits errors.

N	U	Y	N/A
○	○	◉	○

Conducts all work activities with respect for rights and wishes of others.

N	U	Y	N/A
○	○	◉	○

Demonstrates good listening skills.

N	U	Y	N/A
○	○	◉	○

Follows guidelines set in the GCC NMT Student Guide without deviation.

N	U	Y	N/A
○	○	◉	○

Fosters mature, professional relationships with technologists, & remains calm during stressful situations including controlling emotions.

N	U	Y	N/A
○	○	◉	○

Is dressed in accordance with GCC NMT Student Guide without deviation.

N	U	Y	N/A
○	○	◉	○

Is reliable, arrives on time & notifies technologist when leaving clinical site.

N	U	Y	N/A
○	○	◉	○

Refrains from personal or negative conversations that exclude the patient, or include unprofessional subject matter.

N	U	Y	N/A
○	○	◉	○

Takes notes & uses them appropriately.

N	U	Y	N/A
○	○	◉	○

Volunteers to assist others in the department & makes constructive use of downtime. (e.g. stocks rooms, cleans or organizes).

N	U	Y	N/A
○	○	◉	○

Pharmacy Assessment

Accurately operates and utilizes the radiopharmacy computer system and completes all documentation.

N	U	Y	N/A
○	○	○	◉

Accurately performs Q.C. and usage of the GM counter and dose calibrator.

N	U	Y	N/A
○	○	○	◉

Calculates dose/volumes to be adminstered correctly.

N	U	Y	N/A
○	○	○	◉

Checks expiration dates on radiopharmaceutical doses and kits.

N   U   Y   N

Complies with DOT requirements (e.g. receives packages, defacing, transportation index, etc.).

N   U   I   N/A

The student understands the purpose for quality control and can accurately perform as necessary.

N   U   Y   N/A

Demonstrates compliance with package insert and department guidelines.

N   U   Y   N/A

Demonstrates proper record keeping.

N   U   Y   N/A

Demonstrates proper technique when preparing radiopharmaceuticals and drawing up doses.

N   U   Y   N/A

Handles and disposes all radioactive materials properly and safely.

N   U   Y   N/A

Follows ALARA guidelines (e.g. wearing radiation monitors, exposures limits, appropriately wearing & disposing of gloves, etc.)

N   U   Y   N/A

Labels vials and syringes correctly.

N   U   Y   N/A

States NRC limits for 99Mo breakthrough in the eluate & performs assay correctly.

N   U   Y   N/A

States patient dose ranges for each scan.

N   U   Y   N/A

Stays on schedule.

N   U   Y   N/A

Uses aseptic technique.

N   U   Y   N/A

Wears lab coat and uniform per program guidelines.

N   U   Y   N/A

Fusion Imaging PET/CT, SPECT/CT, Assessment

Performs glucose testing accurately and understands glucose limits.

N   U   Y   N/A

Demonstrates and understands the use of contrast media.

N   U   Y   N/A

Follows department protocol for PET/CT imaging.

N   U   Y   N/A

Follows department protocol for SPECT/CT imaging.

N   U   Y   N/A

Demonstrates a knowledge of PET Radiopharmaceuticals.

N   U   Y   N/A

Approved   Not Approved

Appendix J

CLINICAL EDUCATION PLAN

ALLIED HEALTH & NURSING DIVISION CLINICAL EDUCATION PLAN

_____

Student's Name   _____

Program Nuclear Medicine Technology

Date   _____

PROBLEMS IDENTIFIED

CONCLUSION

RECOMMENDATION/ACTION PLAN

Follow-up Date:

Student_____   **Date**

Program Director_____   **Date**

Clinical Coordinator_____   **Date**

Appendix K

NMT PROGRAM PROCEDURE CHECKLIST
(Revised: June 2017, ARRT Implementation Date: January 2017)

No.	Category (mandatory #)	Procedure	Required	Date Completed	Semester	Must have 1 on log sheet at this level to complete a competency
1	Abscess or Infection (0)	Gallium-Abscess/Infection				
2		WBC				
3	Skeletal (2)	Bone-Spot Imaging				5
4		Three-Phase-mot until 8/1	*			5
5		Whole Body				5
6	Cardiovascular (2)	Gated Blood Pool Study-mot until 8/1				4
7		Myocardial Perfusion STRESS (specify)				5
8		Myocardial Perfusion REST (specify)				
9		PET/CT-Cardiac				
10	Endocrine/Exocrine (2)	Thyroid Uptake				5
11		Thyroid Scan				5
12		Thyroid Metastatic Survey				5
13		Parathyroid				
14	Gastrointestinal (3)	Hepatobiliary				5
15		Gastroesophageal Reflux				
16		Gastric Emptying				5
17		Meckel's Diverticulum				
18		GI Bleeding				4
29		Liver/Spleen				5
20		Damaged RBC Spleen				
21		Hemangioma				
22	Genitourinary (1)	Renal Function				
23		Renal-Cortical Imaging/DMSA				
24		Radionuclide Cystogram				
25	Respiratory (2)	Lung Perfusion-mot until 8/1	*			5
26		Lung Ventilation-Gas (or)	*			5
27		Lung Ventilation-Aerosol	*			5
28		Quantitative Lung				
29	Tumor (2)	Gallium-Tumor Localization				
30		Tumor-other (e.g. neuroendocrine, adrenal)				
31		Lymphoscintigraphy				
32		PET/CT-Tumor	**			

No.	Category (mandatory #)	Procedure	Required	Date Completed	Semester	Must have 1 on log sheet at this level to complete a competency
33	SPECT (2)	SPECT-Bone				5
34		SPECT-Brain				
35		SPECT-Liver				
36		SPECT-Tumor (not Hemangioma)				
37		SPECT-Renal				
38		SPECT- Cardiac-other (TI-201 MPI, TI-201 Viability, MPI W/AC, MPI Dual Isotope, Pharmacologic)				
39	Therapeutic Proc (1)	Therapy-Thyroid Ablation (may be simulated)				
40		Therapy-Hyperthyroid (may be simulated)				
41		Therapy-Palliative Bone (may be simulated)				
42		Therapy-Non Hodgkins Lymphoma (may be simulated)				
43	CNS (0)	Brain Planar				
44		Brain Dynamic				
45		Brain PET or PET/CT				
46		Cistemogram-Routine				
47		Cistemogram-CSF Leak				
48		Shunt Patency				
49	Exit (1)	Competency	*		Senior/Spring	
50	General Patient Care	CPR	***	Freshman Orient.	Summer before Freshman/Fall	
51	**These do not count towards the required number of competencies per semester.	Vital Signs (BP, pulse, temp, respir.)	***	Freshman Orient.	Summer before Freshman/Fall	
52		Venipuncture	***	Clinical Practicum II	Freshman/Fall	
53		EKG Placement and Monitoring	***	NM Procedures II/ Clin. Pract. Checklist	Freshman/Fall	
54	Quality Control Procedures	Radiopharaceutical QC	***	Clin. Pract. Checklist	Summer before Senior/Fall	

		SPECT Gamma Camera (uniformity resolution, center of rotation)	***	Clin. Pract. Checklist	Senior	
55		SPECT Gamma Camera (uniformity resolution, center of rotation)	***	Clin. Pract. Checklist	Senior	
56	** These do not count towards the require number of competencies per semester	Dose Calibrator (Constancy, Linearity)	***	Clin. Pract. Checklist	Senior	
57		Well Counter/Uptake Probe (energy calibration)	***	Clin. Pract. Checklist	Senior	
58		Survey Meter (battery check and constancy)	***	Clin. Pract. Checklist	Senior	
59		PET/CT QC (reference or blank scan)	***	Clin. Pract. Checklist	Summer before Senior/Fall	

*Required Competencies begin August of Clinical Internship II (Freshmen Summer)   17 Mandatory+8 Elective+1 Exit Comp

*Required Competencies begin June of Clinical Internship II (Freshmen Summer)

*** Per Clinical Syllabi

Student Name:_____ Date of Graduation:

Appendix L

GENERAL COMPETENCY EVALUATION FORM

Gateway Community College- Nuclear Medicine Technology
General Competency Evaluation Form- Trajecsys

See Trajecsys on line clinical documentation system for specific competency requirements:

Score	Exam item
Pass/Fail	The purpose of a competency is to ensure that the student has mastered his/her skills. The technologist is responsible for ensuring that the student has competently and without error accomplished the procedure. If the skills are performed accurately the student passes the competency, if any skill is performed weakly or incorrectly on the first attempt the student fails the competency. The student performs all patient and room preparation tasks to the technologist's satisfaction. The student is able to perform any calculations needed for procedure.
Pass/Fail	The student keeps the patient as the first priority, including but not limited to patient instructions, patient dignity and safety.
Pass/Fail	The student prepares the camera and computer acquisition protocols without assistance prior to the study.
Pass/Fail	The student is able to keep the room on schedule.

Pass/Fail	Retrieves and identifies the correct patient, and asks the patient only appropriate and pertinent questions regarding the procedure.
Pass/Fail	Remains calm and keeps the technologist(s) informed.
Pass/Fail	Properly handles needles and waste safely at all times.
Pass/Fail	Student positions accurately without assistance and labels images correctly.
Pass/Fail	Demonstrates ALARA and standard precautions at all times.
Pass/Fail	The student demonstrates and scans according to department protocol correctly for the procedure unassisted.
Pass/Fail	Checks all views or images for quality.
Pass/Fail	The student dismisses the patient and completes all necessary information for the radiologist including presenting scan.
Pass/Fail	Accurately calculates and dispenses the dose for the patient unassisted. Completes all necessary information needed to retrieve the dose for the patient from the radiopharmacy.
Pass/Fail	Performs extra views when necessary unassisted.
Pass/Fail	Completes processing needed for the study to be interpreted unassisted.
Pass/Fail	Performs safe administration of the radiopharmaceutical. **Please comment on method of administration: Direct venipuncture, Existing IV line, New IV line, Inhalation, Oral**
Pass/Fail	The technologist is encouraged to question the student on; department protocol, radiopharmaceutical(s), and detailed pertinent information regarding the study before signing off on the competency. If the student cannot respond correctly, it must be documented and the student is not able to complete the competency at this time (a fail is given). The technologist should insert comments that will aid as an educational tool for the student to assist in the successful completion of future competencies.
Total	

Appendix M

DAILY SKILL SUMMARY FORM

Gateway Community College
Nuclear Medicine Technology Program

DAILY SKILL SUMMARY FORM (PATIENT LOG SHEETS)

DATE	STUDY	PARTICIPATION
	EXAMPLE:	
5/2/2015	Whole Body Bone Scan	3

Participation levels: 1=observed; 2=partially assisted technologist; 3=assisted technologist; 4=performed with minimal assistance; 5=performed with indirect supervision

Appendix N

EXIT COMPETENCY

The purpose of a competency is to ensure that the student has mastered all their skills for graduation. The clinical instructor is responsible for ensuring that the student has competently and without error accomplished the above procedure. If the skills are performed accurately the student passes the competency, if any skill is performed weakly or incorrectly on the first attempt the student fails the competency.
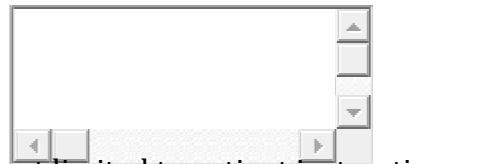
The student performs all patient and room preparation tasks to the Clinical Instructor/Evaluators satisfaction. The student is able to perform any calculations needed for procedure.

Fail   Pass

The student keeps the patient as the first priority, including but not limited to patient instructions, patient
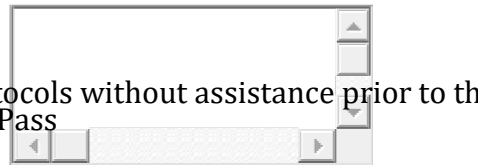dignity and safety.

Fail   Pass

The student identifies correct patient and verifies the procedure requisition.

Fail   Pass

The student prepares the camera and computer acquisition protocols without assistance prior to the study.

Fail   Pass

The student is able to keep the room on schedule.

Fail   Pass

The student asks the patient only appropriate and pertinent questions regarding the procedure.

Fail   Pass

Remains calm and keeps the Clinical Instructor/Evaluator informed.

Fail   Pass

Properly handles needles and waste safely at all times.

Fail   Pass

Fail

Student positions accurately without assistance and labels images correctly.

Demonstrates ALARA and standard precautions at all times.

Fail   Pass

Fail

The student performs scan according to department protocol correctly for the procedure unassisted.

Checks all views or images for quality.

Fail   Pass

Fail

The student dismisses the patient and completes all necessary information for the radiologist including presenting scan.

Accurately calculates and dispenses the dose for the patient unassisted. Completes all necessary information needed to retrieve the dose for the patient from the radiopharmacy.

Fail   Pass

Fail

Performs safe administration* of the radiopharmaceutical; a. direct venipuncture; b. injected through existing IV line; c. established a new IV line; d. inhalation; e. oral.

Performs extra views when necessary unassisted.

Fail   Pass

Completes processing needed for the study to be interpreted unassisted.	Fail ○ Pass ○	
Student demonstrates appropriate interpersonal skills and effective communication.	Fail Pass ○ ○	
The student maintains professional relationship with all personnel involved.	Fail ○ Pass ○	

For Faculty Use Only

For Faculty Completion

Combined score for diagnostic nuclear medicine examinations, radiopharmacy, non-imaging procedures,
radiation safety and protection, support functions,
customer service, safety, attendance and punctuality Fail ○   Pass ○
**(three or more items marked "Fail" will result in
a failed competency).**

○ Approved   ○ Not Approved

Submit

Diagnostic Nuclear Medicine Procedures

| Performs a variety of diagnostic imaging procedures in accordance with departmental protocols to produce information of high diagnostic quality. | Fail ○ Pass ⦿ | |

Radiopharmacy Procedures

Performs a variety of diagnostic imaging procedures in accordance with departmental protocols to produce information
of high diagnostic quality.   Fail ○   Pass ⦿

Non-imaging procedures

Performs all non-imaging procedures and their preparation for analysis according to departmental protocol.
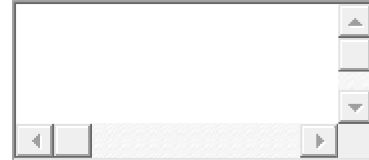
Fail Pass

Quality Control Procedures

Performs daily, weekly, monthly quality control on all instrumentation and other indicated quality control tests according to departmental procedure to ensure all equipment is in proper working order.
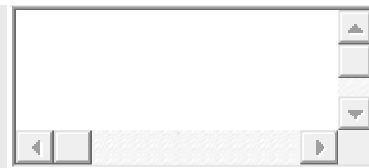
Fail Pass

Radiation Safety and Procedures

Follows ALARA guidelines for radiation exposure as evidenced by monthly film badge reports.
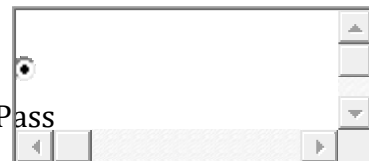
Fail Pass

Support Functions

Follows patient scheduling and tracks patient's completion status using hospital information systems.
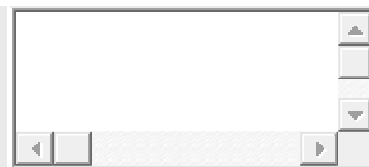
Fail Pass

Customer Service

Interacts with patients, visitors and personnel in a considerate, helpful, and courteous manner.
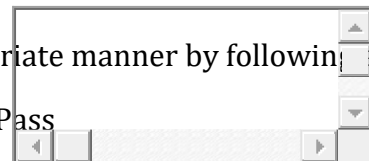
Fail Pass

Safety

Operates assigned equipment safely and performs duties in an appropriate manner by following all procedures as instructed
during training and/or orientation.

Fail Pass

Attendance and Punctuality

Meets program attendance and punctuality requirements to insure proper clinical training and consideration to patients and clinical staff.	○ Fail ◉ Pass	

Appendix O

AGREEMENT TO ABIDE BY INTERNET USE PROCEDURES AT CLINICAL AFFILIATES

NUCLEAR MEDICINE TECHNOLOGY PROGRAM
Agreement to Abide by Internet Use Procedures at Clinical Affiliates

I have read the Procedures Governing the Use of the Online Clinical Documentation System in the Gateway   Community College Nuclear Medicine Technology Student Handbook.

I agree to only access the online clinical documentation system (www.trajecsys.com) to enter my entry and   exit times at the clinical affiliates that allow students to use the Internet for this purpose.

I will not use the Internet for any other purpose at any clinical affiliate.

I will enter my entry and exit times from another computer on a daily basis if I am assigned to a clinical   affiliate that does not allow students to access the Internet at their institution.

I acknowledge that I may be subject to disciplinary sanctions if I deviate from this procedure.

Print Name:

Signature:

Date:

Appendix P

TRAVEL TIMES FOR NMT PROGRAM STUDENTS

The following table includes the travel time that is allowed when NMT Program Students need to travel to and from clinical affiliates or GCC's New Haven Campus. These times were calculated using Yahoo Maps, and an additional 15 minutes was added for parking. Students may be penalized if they leave their clinical area earlier than the times found below.

From	To	Time Allowed (minutes)	From	To	Time Allowed (minutes)
YNHH	GCC	22	Cardinal Health	YNHH	61
YNHH	Griffin	39	Cardinal Health	GCC	60
YNHH	Cardinal Health	61	Cardinal Health	MSX OP	42
YNHH	MSX OP	59	Cardinal Health	MSX Hosp	39
YNHH	MSX Hospital	55	Cardinal Health	WHVA	62
YNHH	WHVA	21	Cardinal Health	St. R. Campus	61
YNHH	St. R. Campus	17	Cardinal Health	Waterbury Hos	58
YNHH	UCONN	70	Cardinal Health	L&M	77
YNHH	Backus	75	Cardinal Health	Griffin	71
YNHH	Midstate Med.	43	Cardinal Health	Midstate Med.	40
YNHH	YNHH (Bridgeport Hospital/Milford Campus)Hosp.	34	Cardinal Health	YNHH (Bridgeport Hospital/Milford Campus)Hosp.	73
Griffin	YNHH	39	MSX OP	YNHH	59
Griffin	GCC	40	MSX OP	Griffin	71
Griffin	Cardinal Health	71	MSX OP	Cardinal Health	42
Griffin	MSX OP	71	MSX OP	WHVA	61
Griffin	MSX Hospital	67	MSX OP	St. R. Campus	60
Griffin	WHVA	38	MSX OP	MSX Hospital	19
Griffin	St. R. Campus	38	MSX OP	GCC	55
Griffin	UCONN	76	MSX OP	UCONN	44
Griffin	L&M	105	MSX OP	L&M	65
Griffin	Backus	113	MSX OP	Backus	68
Griffin	Midstate Med.	54	MSX OP	Midstate Med.	38
Griffin	YNHH (Bridgeport Hospital/Milford Campus)Hosp.	39	MSX OP	YNHH (Bridgeport Hospital/Milford Campus)Hosp.	72

From	To	Time	From	To	Time
MSX Hospital	YNHH	55	Midstate Med.	YNHH	43
MSX Hospital	MSX OP	19	Midstate Med.	Griffin	54
MSX Hospital	Griffin	67	Midstate Med.	Cardinal Health	40
MSX Hospital	Cardinal Health	39	Midstate Med.	MSX OP	38
MSX Hospital	WHVA	58	Midstate Med.	MSX Hospital	35
MSX Hospital	St. R. Campus	57	Midstate Med.	WHVA	44
MSX Hospital	GCC	50	Midstate Med.	St. R. Campus	45
MSX Hospital	UCONN	41	Midstate Med.	Waterbury Hos	40
MSX Hospital	L&M	67	Midstate Med.	UCONN	46
MSX Hospital	Midstate Med.	35	Midstate Med.	Backus	69
MSX Hospital	YNHH (Bridgeport Hospital/Milford Campus)Hosp.	73	Midstate Med.	YNHH (Bridgeport Hospital/Milford Campus)Hosp.	54
WHVA	YNHH	21	YNHH (Bridgeport Hospital/Milford Campus)Hosp.	YNHH	32
WHVA	Griffin	38	YNHH (Bridgeport Hospital/Milford Campus)Hosp.	Griffin	39
WHVA	Cardinal Health	62	YNHH (Bridgeport Hospital/Milford Campus)Hosp.	Cardinal Health	73
WHVA	MSX OP	61	YNHH (Bridgeport Hospital/Milford Campus)	MSX OP	72
WHVA	MSX Hospital	58	YNHH (Bridgeport Hospital/Milford Campus)Hosp.	MSX Hospital	73
WHVA	St. R. Campus	21	YNHH (Bridgeport Hospital/Milford Campus)Hosp.	WHVA	27
WHVA	GCC	25	YNHH (Bridgeport Hospital/Milford Campus)	St. R. Campus	33
WHVA	UCONN	71	YNHH (Bridgeport Hospital/Milford Campus)Hosp.	GCC	36
WHVA	L&M	76	YNHH (Bridgeport Hospital/Milford Campus).	Waterbury Hos	62

WHVA	Backus	78	YNHH (Bridgeport Hospital/Milford Campus)	L&M	86
WHVA	YNHH (Bridgeport Hospital/Milford Campus)Hosp.	27	YNHH (Bridgeport Hospital/Milford Campus)Hosp.	Backus	89
St. R. Campus	YNHH	17	Waterbury Hosp	YNHH	60
St. R. Campus	GCC	22	Waterbury Hosp	Griffin	42
St. R. Campus	Griffin	38	Waterbury Hosp	Cardinal Health	58
St. R. Campus	Cardinal Health	61	Waterbury Hosp	MSX OP	58
St. R. Campus	MSX OP	60	Waterbury Hosp	MSX Hospital	55
St. R. Campus	MSX Hospital	57	Waterbury Hosp	WHVA	57
St. R. Campus	WHVA	21	Waterbury Hosp	St. R. Campus	55
St. R. Campus	L&M	76	Waterbury Hosp	YNHH (Bridgeport Hospital/Milford Campus)Hosp	62
St. R. Campus	Backus	78	Waterbury Hosp	L&M	100
St. R. Campus	YNHH (Bridgeport Hospital/Milford Campus)Hosp.	33	Waterbury Hosp	Backus	89

From	To	Time	From	To	Time
UCONN	YNHH	70	Backus	YNHH	75
UCONN	Griffin	76	Backus	Griffin	113
UCONN	Cardinal Health	34	Backus	Cardinal Health	53
UCONN	MSX OP	44	Backus	MSX OP	68
UCONN	MSX Hospital	41	Backus	MSX Hospital	68
UCONN	WHVA	71	Backus	WHVA	78
UCONN	St. R. Campus	69	Backus	St. R. Campus	74
UCONN	GCC	50	Backus	GCC	81
UCONN	Midstate Med.	46	Backus	Midstate Med.	69
UCONN	Milford	78	Backus	YNHH (Bridgeport Hospital/Milford Campus)Hosp	89
UCONN	L&M	85	Backus	L&M	41
UCONN	Backus	75	Backus	UCONN	75

DIRECTIONS TO CLINICAL AFFILIATES

Yale-New Haven Hospital 20 York Street (main entrance)

I-95 traveling north or south

Exit 47 to Route 34 west to Exit 2 or 3. Follow signs. Covered entrance at 20 York Street. Visitor parking available in Air Rights Garage. Enter from North or South Frontage Roads, or York Street.

I-91 traveling south

Exit 1 to Route 34 west to Exit 2 or 3. Follow signs. Covered entrance at 20 York Street. Visitor parking available in Air Rights Garage. Enter from North or South Frontage Roads, or York Street.

Wilbur Cross Parkway (Rte. 15) traveling south

Exit 59 immediately after tunnel. Right at end of ramp. Merge left onto Whalley Avenue at light. Stay on Whalley until you see signs for Yale-New Haven at Park Street. Follow signs. Covered entrance at 20 York Street. Visitor parking available in Air Rights Garage. Enter from North or South Frontage Roads, or York Street.

Merritt Parkway (Rte. 15) traveling north

Exit 57 to Route 34 east into New Haven. Right onto Ella T. Grasso Boulevard (Rte. 10) and left onto South Frontage Road (Legion Ave.). Follow hospital and Rte. 34 signs. Covered entrance at 20 York Street. Visitor parking available in Air Rights Garage. Enter from North or South Frontage Roads, or York Street.

Route 1 (Boston Post Road) traveling east

After crossing Ella T. Grasso Boulevard (Rte. 10), turn left onto Davenport Avenue. When Davenport crosses Howard Avenue, it becomes York Street. Hospital's main entrance is on the left. Parking is straight ahead in Air Rights Garage spanning York Street.
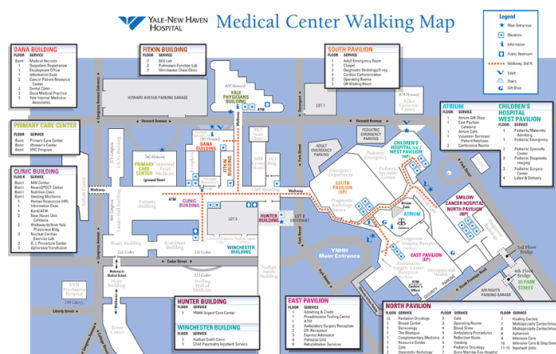
Bus Stops/Routes:

Call or E-mail CT Transit Telephone Information Center for times: (203) 624-0151 Route B: West Haven to Yale-New Haven Hospital
Route O: Sylvan Ave./Route 1, YNHH (Bridgeport Hospital/Milford Campus)to Yale-New Haven Hospital
Downtown Commuter Connection/Shore Line East (shuttle from Union Station to York & Cedar)

YNHH- Saint Raphael Campus

From I-91 South

Leave I-91 south at Exit 1 (Downtown New Haven). Continue straight on the exit expressway, where it merges with Frontage Road. Continue through four lights and then turn right at the fifth light, onto Orchard Street. After the first light you will see a Saint Raphael's garage to your left and another to your right.

From I-95 South

Leave I-95 South at Exit 47 (Downtown New Haven). Continue straight on the exit expressway, where it merges with Frontage Road. Continue through four lights and then turn right at the fifth light, onto Orchard Street. After the first light you will see a Saint Raphael's garage to your left and another to your right.

From Route 8 South

Take Route 8 south to Route 34 east to Ella Grasso Boulevard. Continue straight ahead to Derby Avenue. Derby Avenue changes to George Street. Once past Sherman Avenue, a hospital garage is on the left.

From Bridgeport and New York City areas (south)

Take I-84 east to Route 8 south in Waterbury. Follow Route 8 South to Route 34 east to Ella Grasso Boulevard. Continue straight ahead to Derby Avenue. Derby Avenue changes to George Street. Once past Sherman Avenue, a hospital garage is on the left.

Or, leave the Wilbur Cross Parkway at Exit 57 (Route 34 east). Continue on Route 34 until you cross Ella Grasso Boulevard. Continue straight ahead on to Derby Avenue. Derby Avenue changes into George Street. Once past Sherman Avenue, a garage is on your left. Additional parking is available if you take the next left on to Orchard Street; the garage will be on your right.

Or, leave I-95 north at Exit 47 (downtown New Haven). Continue straight on the exit expressway, where it merges with Frontage Road. Continue through four lights and then turn right at the fifth light, onto Orchard Street. After the first light you will see a Saint Raphael's garage to your left and another to your right.

Parking

There are two parking garages on the Hospital campus. Visitor parking is available in the 850-car garage on Hospital grounds at the corner of Orchard and George streets. A sheltered access from the George Street Garage to the Hospital is available by using the elevators at the rear of the garage to the first level, and following the signs. There is also a 500-space parking facility on Orchard Street, which has service parking for oversized vehicles. The garage office is in the cashier's booth area in the George Street Garage. Both garages are owned by Seton Real Estate.

VA Connecticut Healthcare System, West Haven Campus

From I-91 Southbound:

Take I-91 South to New Haven, where it ends and interchanges with I-95 South to Exit 43, "First Avenue." At the end of the exit ramp, turn right onto First Avenue. Proceed one block to the next stop light and turn left. Again, proceed one block to the next stoplight, and turn right onto Campbell Avenue. At the next light, turn left into the large driveway, proceed up the hill, and follow the signs to the visitors' parking areas.

From I-95 Northbound:

Take I-95 North to Exit 43, "Downtown West Haven." At the end of the exit ramp, turn left onto Campbell Avenue. Proceed through two stop lights to the VA Medical Center on your left. Turn left into the large driveway, proceed up the hill, and follow the signs to the visitors' parking areas.

From Route 34:

Follow Route 34 into West Haven, and turn right onto Route 122, Forest Road (the large intersection with a car dealership on the right corner). Proceed on Forest Road for about 2 miles until you come to a large, multiple branching intersection with a Merit gas station across the street. From the right lane, proceed straight through the intersection, then bear left at the fork onto Campbell Avenue. Proceed on Campbell Avenue for about 1 mile, through 2 stop lights, and past the University of New Haven on your right. Turn right into the VA Medical Center driveway, proceed up the hill, and follow the signs to the visitors' parking areas.

Griffin Hospital

Route 34 from New Haven:
Follow signs to Route 8 North, take Exit 17 to stop sign, turn left onto Seymour Avenue for 1/4 mile. Griffin Hospital is on right.

Route 8 North and South:
Take Exit 17, turn left at stop sign onto Seymour Avenue, follow road ½ mile. Griffin Hospital is on right.

Merit Parkway (Route 15) North and South:
Take Exit 52 (Route 8 North/Waterbury). Take Exit 17 off Route 8, turn left at stop sign onto Seymour Avenue, follow Road ½ mile. Griffin Hospital is on the right.

Middlesex Hospital, Middletown

From Middlesex Hospital Outpatient Center
Exiting the Outpatient Center turn right onto Saybrook Road. Follow approximately 1.5 miles. After two traffic lights, Saybrook Road turns into Main Street Extension. At the third light, take a left onto Crescent Street. The Hospital is on Crescent Street.

From North (Hartford)
Take I-91 South to Exit 22S, Route 9 South. Follow Route 9 through Middletown. Take Exit 13, Route 17. Bear right and take Main Street Extension exit. At the bottom of the exit, take a right at the stop sign. Follow Main Street Extension until the first light. Take left onto Crescent Street. The Hospital is on Crescent Street.

From South (Meriden)
Take I-91 or Wilbur Cross Parkway to Route 691 East. Follow Route 691 (becomes Route 66) to Main Street, Middletown. Turn right onto Main Street. Continue down Main Street, turn right onto Crescent Street into Hospital Campus.

From West
Take I-84 to Route 691 East. Follow Route 691 (becomes Route 66) to Main Street, Middletown. Turn right onto Main Street. Continue down Main Street, turn right onto Crescent Street into Hospital Campus.

from New York/New Haven
Take I-95 North to Exit 69, Route 9 North at Old Saybrook. Stay on Route 9 to Exit 12. At end of exit, turn left. At next stop sign, turn left. At next stop sign, turn right onto Saybrook Road. Continue for a half mile. Turn left onto Crescent Street into Hospital campus.

(alternate route)
Take I-95 to I-91 North. Change to Route 9 South toward Cromwell/Middletown. In Middletown, take Exit 13 and bear right onto Main Street Extension. At the third light, turn left onto Crescent Street. The Hospital is on Crescent Street.
Middlesex Hospital Student Parking: park at Elks lot.

Directions to Middlesex Hospital, Outpatient Center
534 Saybrook Road, Middletown
From Hartford
Take I-91 South to Exit 22S, Route 9 (left exit). Follow Route 9 to Exit 11. Turn right off of Exit 11.   Turn left onto Coe Road. At stop sign, take left onto Saybrook Road. The Outpatient Center is 0.2 miles ahead on the right.

From the Shoreline
Route 9 to Exit 11, Randolph Road. Go straight through stop light to stop sign. Turn left onto Saybrook Road. Follow for .2 miles. The Outpatient Center is on the right.

From Middletown Center
Follow Main Street through the center of town, past Crescent Street and Middlesex Hospital. Approximately 1.5 miles past the Hospital, Outpatient Center is on the left. **Parking:** students to park in in the back of the lot.

Cardinal Health Nuclear Pharmacy Services
31 Hartland Street, East Hartford, CT 06108 (860) 291-9027

From GCC, New Haven Campus:

Get on 91 North.

Take exit #29 onto US-5 North for East Hartford/Boston. Merge onto CT-2 via exit #90 toward

East River Drive. Take exit #3- Pitkin Street.

Turn left onto Pitkin Street. Turn left on Meadow Street.

Turn left on Hartland Street.

Yale New Haven Health, Bridgeport Hospital, YNHH (Bridgeport Hospital/Milford Campus) Campus
300 Seaside Avenue, Milford, CT 06460 (203) 876-4000

From Hartford Region and Points North:
Take I-91 South to I-95 South to Exit 36 (Plains Road). At the end of the ramp turn left and follow blue Hospital signs.

From Fairfield County and Points South:
Take I-95 North to Exit 36 (Plains Road). At the end of the ramp, turn right and follow blue Hospital signs.

From Merritt/Wilbur Cross Parkways and Points North:
Take Exit 54 to I-95 South. Take I-95 South to Exit 36 (Plains Road). At the end of the ramp turn left and follow blue Hospital signs.

From Merritt/Wilbur Cross Parkways and Points South:
Take Exit 54 to I-95 South. Take I-95 South to Exit 36 (Plains Road). At the end of the ramp turn left and follow blue Hospital signs.

MidState Medical Center
435 Lewis Avenue, Meriden, CT 06451 (203) 694-8200

From downtown Meriden: Take Main Street to Lewis Avenue north (toward Westfield Shoppingtown Meriden). The entrance to MidState is less than one mile, on right (opposite Westfield Shoppingtown Meriden entrance). From I-91 or Route 15: Take I-91 or Route 15 to I-691 west. Take exit 6, to traffic light on Lewis Avenue. The entrance to MidState Medical Center is straight across Lewis Avenue.

From Cheshire and Southington: Take I-691 east to exit 5, Chamberlain Highway. Turn left off exit ramp and turn right at third traffic light. At first traffic light, turn right onto Lewis Avenue. The entrance to MidState is on left (opposite Westfield Shoppingtown Meriden entrance).

From Wallingford: From I-91 or Route 15: Take I-91 or Route 15 to I-691 west. Take exit 6, to traffic light on Lewis Avenue. The entrance to MidState Medical Center is straight across Lewis Avenue.

MidState Medical Center's East Campus, 883 Paddock Avenue, Meriden, CT 06450

From Route 91 (North of Meriden): Proceed south to East Main Street (exit 17). While on exit ramp, bear right onto exit 67 for East Main Street. At end of ramp, turn right and go 1/4 mile to traffic light at Paddock Avenue. Turn left and go 1 1/4 miles. The medical center is on right.

From Route 91 (South of Meriden): Proceed north toward Meriden. Take the Durham/Yalesville exit (exit 15). Turn left at end of ramp, onto Route 68. Continue 1/2 mile to North Farms Road and turn right.   Continue one mile as road becomes Paddock Avenue. The medical center is on left.

From Route 15 (North of Meriden): Proceed south to East Main Street (exit 67W). Bear right onto East Main Street for 1/4 mile to traffic light at Paddock Avenue. Turn left and go 1 1/4 miles. The medical center is on right.

From Route 15 (South of Meriden): Proceed north toward Meriden. After exit for Route 5 (exit 66), continue one mile to D.O.T. exit ramp. At end of ramp (Miller Avenue), turn right onto Miller Avenue. Then turn right onto Paddock Avenue. The medical center is 1/4 mile ahead on right.

UConn Health Center
263 Farmington Avenue, Farmington, Connecticut 06030 (860) 679-2000
From Bradley International Airport: follow Route 20 to I-91 South to I-84 West in Hartford. Follow I-84 West about 7 miles to Exit 39 which is after 39A. Turn right at first traffic light onto Route 4 East (Farmington Avenue). At third traffic light, turn right to enter the Health Center campus.

From I-84: take Exit 39 (if coming from I-84 West, Exit 39 is after 39A). Turn right at first traffic light onto Route 4 East (Farmington Avenue). At third traffic light, turn right to enter the Health Center campus.

From Northbound Route 9: take Exit 32 (left exit) onto I-84 West and stay in the right lane. Take Exit 39 (first exit). Turn right at first traffic light onto Route 4 East (Farmington Avenue). At third traffic light, turn right to enter the Health Center campus.

To Return to Route 9: exit the Health Center campus via Munson Road. At the end of Munson Road, turn left onto South Road. At next stop sign, turn right and follow signs to I-84 East, staying in the right lane to exit onto Route 9 South.

Bus Routes: the UConn Health Center is on **CT** Transit bus routes E, E1, E6 and E7. For current weekday and weekend schedules, call **CT** Transit at 860-525-9181 or visit their website.

Lawrence Memorial Hospital
365 Montauk Avenue, New London, CT 06320 (860) 442-0711
From Hartford: Take Route 2 east to Route 11, follow to the end. At the end of the exit ramp turn left on to Route 82. At the light (Salem Four Corners) turn right onto Route 85. Continue south for approximately 12 miles into New London. Turn right at traffic light onto Colman Street (Route 213). At the end of Colman, turn right onto Bank Street, then an immediate left onto Lee Avenue. At the end of Lee, turn right onto Ocean Avenue. Go through one stop light, then turn left at the fourth street onto Faire Harbour Place (for Same-Day Surgery, Emergency Room, Community Cancer Center and Physicians Office Suites, patient drop-off area will be on the right). At stop sign turn right on Montauk Avenue. The Ambulatory Care Center and Main Hospital Entrances are on the right.

From Worcester or Norwich: Take I-395 south to exit 78 to Route 32. Follow Route 32 into downtown New London where it becomes Eugene O'Neill Drive and then Green Street. Turn left at the end onto Tilley Street and a right onto Bank Street at the fire station. Follow Bank Street to the fourth stop light and turn left at Shalett's Cleaners onto Montauk Avenue. The Ambulatory Care Center and Main Hospital Entrances will be on the right, approx. one mile.

From New York and New Haven: Take I-95 north to exit 82A, Frontage Road. Keep right and follow to Colman Street exit (Route 1 south). Turn left onto Colman Street and follow second paragraph of the directions from Hartford.

<u>**William W. Backus Hospital**</u>

326 Washington Street
Norwich, CT 06360 (860) 889-8331

FROM THE NEW HAVEN AREA AND SOUTHWESTERN CONNECTICUT: Take I-95 North to Exit 76 for I-395North. Follow 395 to Exit 81 -East for the Routes 2 and 32 connector in Norwich. Follow the connector until you exit to your right onto Washington Street. The Hospital entrance is on the right.
FROM THE HARTFORD AREA: Take Route 2 East to Norwich. Exit right onto Washington Street. The Hospital entrance is on the right.

FROM BRADLEY INTERNATIONAL AIRPORT WINDSOR LOCKS, CT: Follow airport signs for I-91 South. Follow I-91 South to Hartford; watch carefully for SHARP left exit to Route 2 East. Take Route 2 East to Norwich. Exit right onto Washington Street. The Hospital entrance is on the right.

FROM THE GROTON AREA: Take I-95 South and go over the Gold Star Memorial Bridge. On the New London side of the bridge, take Exit 84 for Route 32 North. Follow Route 32 to I- 395 North. Follow I-395 to Exit 8I-East for the Routes 2 and 32 connector in Norwich. Follow the connector until you exit to your right onto Washington Street. The Hospital entrance is on the right.

FROM THE NEW LONDON AREA: Take Route 32 north to I-395 North. Follow I-395 to Exit 81 East for the Routes 2 and 32 connector in Norwich. Follow the connector until you exit to your right onto Washington Street. The Hospital entrance is on the right.

FROM NORTHEASTERN CONNECTICUT: Follow I-395 South to Exit 81 -East for the Routes 2 & 32 connector in Norwich. Follow the connector until you exit to your right onto Washington Street. The Hospital entrance is on the right.

To emphasize the importance of students parking in the assigned lot, please remind students:

1.	Incoming students park at 61 Woodland Street Lot when coming in for Human Resources ID badge, department orientation, etc. DO NOT PARK IN THE COLLINS GARAGE. Tickets will not be validated, but more importantly, patients will not have space to park.
2.	Promptly submit parking verification forms, obtain a parking assignment, mirror tag. Instructions are on the bottom of the form -available in the Infonet.
3.	 Shuttle service starts at 4pm, every twenty minutes from PCT front entrance, for escort to your vehicle.

THE HOSPITAL OF CENTRAL CONNECTICUT

100 Grand St New Britain, CT 06052

 From Hartford: Get on I-84 from Main St, Head north on Main St toward State House Square, continue straight to stay on Main St, turn left onto Chapel St N, Use the left lane to take the Interstate 84 W ramp to Waterbury. Follow I-84 and CT-9 S to Chestnut St in New Britain. Take exit 27 from CT-9 S, Merge onto I-84, Keep left to stay on I-84, Take exit 39A for Ct-9 S toward Newington/New Britain, continue onto CT-9S, use left lane to take exit 27 for Chestnut Street. Continue on Chestnut St to your destination, turn right onto Chestnut St, continue straight unto arch street slash Chestnut St, turn right on to grand street, turn left, turn right. The entrances are on your right.

From Norwich/Worcester: Via CT-2 W: Take Broadway in Washington 10 St to CT-2W/CT-32N, Head Northeast on Main Street toward Main Street, turn left onto Franklin street, turn left onto bath St, turn right on to Broadway, slight right onto Washington street, continue on to CT-2W to New Britain. Take exit 26 from CT-9 N. Use the left 2 lanes to turn left onto CT-2 W/CT-32N. Take exit 5D for CT-3 S toward Wethersfield, continue onto CT-3 S toward Wethersfield, continue onto CT-3 S, Use the left lane to merge onto I-91 S toward New Haven. Take exit 22N to merge onto CT-9 N toward New Britain, Take exit 26 toward Downtown New Britain, Take Chestnut St and Arch St to your destination, Use the right lane to merge onto Columbus Blvd, Turn left onto Chestnut St, Continue straight onto Arch St/Chestnut St, turn right on to grand street , turn left, turn right. The entrances are on your right.

From New Haven: Get on I-91 N from Elm St, Head northeast on College St toward Phelps Gate, turn right onto Elm St, turn left onto State St, turn right to merge onto I-91 N. Continue on I-91 N to New Britain. Take exit 26from CT-9 N, Merge onto I-91 N, Take exit 22-22N-22S to merge onto CT-9 N toward New Britain, Take exit 26 toward Downtown New Britain, Take Chestnut St and Arch St to your destination, Use the right lane to merge onto Columbus Blvd, turn left onto Chestnut St, straight onto Arch /Chestnut St, Continue to follow Arch St, Turn right onto Grand St, Turn left, Turn right. The entrances are on your right.

Appendix R

REQUEST FOR REFERENCE

Any student who wishes to request that the Nuclear Medicine Director or Clinical Coordinator from Gateway Community College render a verbal or written reference must fill this form out and have it signed.

The student noted below hereby authorizes Gateway Community College and the Program Director and Clinical Coordinator to release any and all documents, records, reports and information, including the academic records, personal information and otherwise privileged or confidential information to the person/institution listed below regarding the academic record, character, ethics, behavior, and such other information bearing on student's qualifications, including any information which the student have provided. The student noted below releases Gateway Community College and the Program Director and Clinical Coordinator from any and all liability in connection with disclosure of this information covered by this authorization.

Request for Reference

Date:

Student Name:

Name of person the reference is requested from:

_____

Institution that the request is for:

_____

Student Signature:

Request granted by:

This form will be kept in the student's file for one (1) year. After one (1) year no reference be given, unless this
written consent is renewed by the student.

ACADEMIC EXIT FORM

Gateway Community College Allied Health & Nursing Division

Academic Exit Form

Student Name:

Reason for Student Exit: (Check one of the following)

_____ Academic Withdrawal (passing grade at time of exit)

_____ Academic Withdrawal (failing grade at time of exit)

_____ Academic Failure- Allied Health or Nursing Course (at end semester)

_____ Academic Failure- Corequisite Course (at end semester)

_____Personal Reasons_____

Summary of Student Exit:

Plan for Success: The student needs to do the following to assist with success in the future and consideration for readmission.

Student Signature:_____Date:_____

 Program Coordinator Signature:_____Date:_____

Division Director Signature:_____Date:_____

Appendix T

GCC EMERGENCY PROCEDURES

EVACUATION PLAN:

1. **Everyone** in the building must evacuate when an alarm sounds and/or upon verbal notification by authorized personnel.

— All persons in classrooms should be directed to move in an orderly manner to the designated exits posted on the **Emergency Action Plan** chart located on the wall of the room's egress.
— If time and safety permits, close all doors.
— If your assigned exit is blocked, keep calm and seek nearest exit.
— When outside of building proceed away from the building and stay out of roadways and areas utilized by emergency personnel.
— Remain outside of the building until the security staff authorizes re-entry.

2. The Early Learning Center evacuated to the Temple Street Garage.

3. Gateway Garage evacuated to the Crown Street sidewalk.

4. Persons with a physical/mobility disability, who cannot exit, should be accompanied to the rescue area and where they shall wait for the emergency personnel to arrive and evacuate them. The rescue areas are as follows:
   ▪ **Second Floor Bridge-stairwell/escalator**
   ▪ **Third Floor Bridge-stairwell**
   ▪ **Fourth Floor Bridge-stairwell**

EMERGENCY LOCK DOWN PROCEDURES

1. If a lockdown occurs, proceed to nearest office or classroom. If already in office or classroom, stay there.

2. If time and safety permits, close and lock all doors.

3. Shut off lights and stay out of sight.

   4. Dial 911 (9-911from college phone) or call GCC Security 203-285-2246/203-285-2611(X2246/X2611)

5. Do not leave your location until you are given an "all clear" sign by an authorize person – Police, Fire or Security Staff.

6. STAY:
   ▪ CALM
   ▪ QUIET
   ▪ WAIT

Lock-Down/Shelter-In-Place (rev. 3/18)

A lock-down condition may be required for a number of different types of emergencies such as a hostile intruder, violent or weapons situation, a chemical spill or plume, severe weather or civil unrest.

Lock-down announcements are given, in English only, over the building Emergency Telephone Notification System and/or the Fire Alarm Annunciator System.

ACTIVE SHOOTER...

RUN, HIDE, OR FIGHT IF A HOSTILE INTRUDER IS PRESENT ON CAMPUS,

Quickly determine the most reasonable way to protect you own life. A hostile intruder situation can change rapidly. In addition to being aware of your surroundings and escape routes, thinking about how

you will react to a hostile intruder situation in advance will help you act quickly and efficiently Take time to understand your surroundings and environment then make a plan.

During an active shooter or hostile intruder event there are three choices an individual can make

RUN ...

If possible, run to an exit evacuate the building and get

to a safe location - this is your first option. If a safe exit is available, take It 1mmedIately Warn others of the impending danger and encourage them to come with you, but do not let them slow you down.

HIDE...

If a safe escape 1s not possible. Proceed to the nearest office or classroom until help arrives or safe exit is available. Close, lock and barricade doors and windows. Turn off lights. Hide behind something thick, and silence cell phones. Call 911 **(8-911 from college phones)**. Your goal is not only to stay out of sight, but to prevent the shooter from reaching you. Barricades also distract the shooter allowing more time for you and responders. Do not answer the door or respond to voice commands until you are sure they are coming from police or other legitimate responders. **Stay calm, quiet and wait**.

FIGHT...

As a last resort, and only if your life is in danger, you may choose to fight. Be aggressive, Use improvised weapons (fire extinguishers. scissors. hot coffee, glass containers, or anything else available) and commit your actions. Fight as a group if possible. This action also distracts the shooter and allows time and opportunity for police to act.

EMERGENCY REPORTING PROCEDURES

Notify the Security Department of any emergency situations. Keep calm. Keep others calm. Campus Security Department: ON CAMPUS dial 52246 and OFF CAMPUS dial 203-285-2246

* In a medical or police emergency in which Security cannot be reached, d**ial 911 (8-911** from college phone)

EMERGENCY PHONE NUMBERS

Emergency Operator (All life-threatening Emergencies) 8- 911

When calling, stay calm and carefully explain the problem and location to the Dispatcher. **Do not hang up until told to do so.**

Information to give to 911 and/or Public Safety:
- Your Name
- Emergency Location (Bldg. name & #, Floor #_____, Room #___)
- Size and Type of Emergency
- Any Additional Information requested by the Operator

College Operator 203-285-2000 (X5-2000)
Security Department 203-285-2246 (X5-2246)
Building Maintenance Supervisor 203-285-2240 (X5-2240)
Facilities and Events Management Director... .203-285-2223 (X5-2223)

ARRT ELIGIBILITY FOR CERTIFICATION

All ARRT certification categories have three basic requirements:
1. Ethical Behavior   2. Educational Preparation   3. Examination

Ethics

The ethical behavior eligibility requirement is the same for both ARRT certification categories: primary (radiography, nuclear medicine technology, radiation therapy) and post- primary (advanced-level and added qualifications).

The requirements specify that every application for certification and every registrant must "be a person of good moral character and must not have engaged in conduct that is inconsistent with the ARRT Rules of Ethics," and they must "agree to comply with the ARRT Rules and Regulations and the ARRT Standards of Ethics."

One issue addressed by the Rules of Ethics is the conviction of a crime, including a felony, a gross misdemeanor or a misdemeanor, with the sole exception of speeding and parking violations. All alcohol and/or drug related violations must be reported. Conviction as used in this provision includes a criminal proceeding where a finding or verdict of guilt is made or returned but the adjudication of guilt is either withheld or not entered, or a criminal proceeding where the individual enters a plea of guilty or nolo contendre. All potential violations must be investigated by the ARRT in order to determine eligibility. Further information may be found on the web site in the handbooks for each certification category.

Education

Eligibility for certification also specifies the satisfaction of educational preparation requirements. For the primary categories of radiography, nuclear medicine technology, and radiation therapy, eligibility requires the successful completion of a formal educational program in the respective discipline that is accredited by a mechanism acceptable to ARRT. Beginning January 1, 2015 candidates must also earn an associate degree and demonstrate competency in didactic coursework and an ARRT-specified list of clinical procedures. Further details may be found here and in the handbook for primary certification categories.

For post-primary categories (i.e., mammography, CT, MR, quality management, sonography, bone densitometry and vascular sonography, cardiovascular interventional technology), satisfaction of the preparation requirements involves documentation of ARRT-specified clinical experience. Further details may be found in the handbooks available for each of the post-primary certification categories.

Examination

Finally, eligibility requires that applicants for certification, after having met all other qualifications for certification, must pass an examination developed and administered by the ARRT. The exams assess the knowledge and cognitive skills underlying the intelligent performance of the tasks typically required of staff technologists practicing within the respective disciplines. The handbooks available for each of the disciplines provide

specifications listing the content covered by the examination. Visit www.arrt.org for detailed information.

<div align="center">**Appendix V**</div>

NMTCB ELIGIBILITY FOR CERTIFICATION

A. General Qualifications

Candidates must comply with the Society of Nuclear Medicine Technologist Section's Code of Ethics (adopted by the NMTCB, April 2004). A Disciplinary Policy took effect on

January 1, 2005. The details regarding this policy and the effects it will have on candidate eligibility are available on the NMTCB web site (www.nmtcb.org).

B. Educational Requirements

Graduates of approved nuclear medicine technology programs are eligible to take the NMTCB Certification Examination. Approved programs include JRCNMT (Joint Review Committee on Educational Programs in Nuclear Medicine Technology) approved programs and programs from a regionally accredited academic institution which grants a certificate, associate degree, or baccalaureate degree in nuclear medicine technology.

This includes schools, colleges, or universities accredited by one of the six regional accrediting bodies: Middle States Association of Colleges and Schools, North Central Association of Colleges and Schools, New England Association of Schools and Colleges, Northwest Association of Schools and Colleges, Southern Association of Colleges and Schools, Western Association of Schools and Colleges. A candidate for examination must show documented evidence of one of the following:

I.   Completion of a NMTCB recognized nuclear medicine technology program.

II.   Completion of a certificate, associate degree or baccalaureate degree in nuclear medicine technology program from a regionally accredited academic institution. * Regionally accredited college and university Programs must have structured clinical training sufficient to provide clinical competency in radiation safety, instrumentation, clinical procedures, and radiopharmacy. This should require approximately 1000 hours of clinical training supervised by program faculty.

Once the NMTCB has received a complete application, it is processed. Verification of graduation status of NMT program applicants is determined by a letter sent to their Program director. All verifications must be returned by the Program director. You MUST have fulfilled all graduation requirements to sit for the certification examination and the NMTCB will NOT mail your authorization letter until the verification has been received.

Go to www.nmtcb.org for detailed information.