



**Coleman College for Health Sciences  
Nuclear Medicine Technology Program  
Practicum V Nuclear Medicine Technology  
NMTT 2267**

**Semester  
with Course  
Reference  
Number  
(CRN)**

Spring 2014 – RT  
CRN 75595

**Instructor  
contact  
information**

Rene Hyder: 713-718-7355, email: [rene.hyder@hccs.edu](mailto:rene.hyder@hccs.edu)  
Vikki Davis-Littleton, 713-718-7398; [vikki.davislittleton@hccs.edu](mailto:vikki.davislittleton@hccs.edu)

**Office  
Location and  
Hours**

Coleman Campus: Rooms 524  
Office hours: Rene Hyder: Fridays 11:00-3:00

**Course  
Location/  
Times**

Mondays, Wednesdays and Fridays, 8:00 am – 4:10 pm  
at the student's assigned clinical site

**Course  
Semester  
Credit Hours**

Credit Hours 3.00  
External Hours 24.00

**Total Course  
Contact Hours**

336

**Course Length  
(number of weeks)**

15 weeks

**Type of  
Instruction**

Practicum

**Course  
Description:**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

**Course  
Prerequisite  
(s)**

**PREREQUISITE(S):**

- NMTT 2266 with a minimum grade of C or better

**Academic Discipline/CTE Program Learning Outcomes**

1. Prepare and administer radiopharmaceuticals.
2. Correlate nuclear medicine procedures with normal anatomy/physiology and abnormal pathology.
3. Utilize proper methods of patient care.
4. Competently perform imaging and non-imaging nuclear medicine procedures.
5. Demonstrate radiation safety techniques to minimize radiation exposure.
6. Perform quality control procedures.

**Course Student Learning Outcomes (SLO): 4 to 7**

1. Apply the theory, concepts and skills involving specialized materials
2. Apply the theory, concepts and skills involving tools and equipment
3. Apply the theory, concepts and skills involving procedures
4. Demonstrate legal and ethical behavior and safety practices"

**Learning Objectives (Numbering system should be linked to SLO - e.g., 1.1, 1.2, 1.3, etc.)**

**Apply the theory, concepts and skills involving specialized materials**

1. Accurately administer radiopharmaceuticals by the correct route of administration

**Apply the theory, concepts and skills involving tools and equipment**

1. Perform quality control procedures on cameras and dose calibrators.
2. Construct and evaluate a freshman student on performing an instrumentation quality control procedure.

**Apply the theory, concepts and skills involving procedures**

1. Perform routine and non-routine diagnostic procedures available at the assigned clinical site.

**Demonstrate legal and ethical behavior and safety practices"**

1. Document studies completed and radiopharmaceutical usage as required by state regulatory requirements and program guidelines.
2. Correctly order radiopharmaceuticals for future studies in compliance with RAM license limits and specific clinical procedures.

**SCANS and/or Core Curriculum Competencies: If applicable**

**SCANS**

**Apply the theory, concepts and skills involving specialized materials**  
Workplace Competencies - Resources -Allocates Money

**Apply the theory, concepts and skills involving tools and equipment**  
Workplace Competencies - Resources -Allocates Human Resources

**Apply the theory, concepts and skills involving procedures**  
Workplace Competencies - Interpersonal -Exercises Leadership

**Demonstrate legal and ethical behavior and safety practices"**

**Course Calendar** See course times and instructor requirements

**Instructional Methods** Face to Face  
Web-enhanced (49% or less)

**Student Assignments**

**Apply the theory, concepts and skills involving specialized materials**

Discussions  
Projects

**Apply the theory, concepts and skills involving tools and equipment**

Discussions  
Projects: Freshman instrumentation project

**Apply the theory, concepts and skills involving procedures**

Discussions  
Projects

**Demonstrate legal and ethical behavior and safety practices"**

Discussions  
Projects

**Student Assessment (s)**

**Apply the theory, concepts and skills involving specialized materials**

Oral and written reviews and discussions  
Quizzes/Tests which may include: definitions, matching, multiple choice, true/false, short answer, brief essay

**Apply the theory, concepts and skills involving tools and equipment**

Oral and written reviews and discussions  
Quizzes/Tests which may include: definitions, matching, multiple choice, true/false, short answer, brief essay

**Apply the theory, concepts and skills involving procedures**

Oral and written reviews and discussions  
Quizzes/Tests which may include: definitions, matching, multiple choice, true/false, short answer, brief essay

**Demonstrate legal and ethical behavior and safety practices**

Oral and written reviews and discussions  
Quizzes/Tests which may include: definitions, matching, multiple choice, true/false, short answer, brief essay

**Instructor's Requirements**

Student is expected to record their time entering and leaving their assigned clinical site on the timesheet provided by the program. Falsification of time in clinic is reason for expulsion from the program. If the student has to make-up any time missed, the make-up time must be approved by the clinical supervisor and the instructor of record for HCC must also be notified. This make-up time must occur Monday through Friday, between 7:00 am and 5:00 pm and must be done in one-half or full days.

There will be a mid-term exam, from the HCC course instructor as well as mid-term and final evaluations from the clinical site.

The student is required to instruct and evaluate a freshman student on an instrumentation project during this semester.

**Program/  
Discipline  
Requirements: If  
applicable**

Any student who accumulates more than 12.5% or 42 hours in a clinic will be administratively withdrawn from the course without notification. All of the time missed will count off in grading. Make-up days are only allowed if the student has to appear in court, has a severe personal illness, accident, or death in the immediate family (parent, child, brother, sister, spouse, or grandparent). In the event any of these occur, the student must call and speak personally with the instructor @ 713-718-7355 or the clinical coordinator @ 713-718-7398 on the day the absent occurs. The student must also call the clinical supervisor at the clinic and report the absence. The student must provide documented evidence of the reason for missing the clinic class, i.e.: a doctor's statement in the case of personal illness, the student's name and date on the court's documentation, an accident report in the case of an accident or an obituary or funeral program in the case of death in the immediate family. This documentation must be provided prior to scheduling a date for the clinic make-up day. Once the paperwork has been accepted the instructor will contact the clinic and coordinate with the clinic supervisor an available time for make-up. If the student does not attend the scheduled make-up day no other accommodations will be made. If the student has missed over four days they will be administratively withdrawn from the class. If the student has missed less than four days the points will be deducted from the grade [ See course grading ].

If this time is not made up by the last day of the semester, the student will receive an "I" and will not be allowed to register for the following semester until the time has been made up.

If a student is absent from clinic and does not call the clinical supervisor and Rene or Glenn, 5 points will be deducted from the final exam grade for each occurrence.

This course does include a final examination. The final examination must be taken on the day and time designated by the instructor unless there is a personal illness, accident or death in the immediate family (parent, child brother, sister, spouse or grandparent). In the event any of these occur, the student must call and speak personally with the instructor, 713-718-7355, or the department head, 713-718-7354, on the day of the examination. The student must provide documented evidence of the reason for missing the examination: doctor's statement in the case of personal illness, an accident report in the case of an accident or an obituary or funeral program in the case of death in the immediate family. This documentation must be provided prior to taking a make-up final examination. The make-up final must be taken within 7 working days from the original test date or at the discretion of the instructor. In the case of severe injury or long term illness, the student will be given an "I" for incomplete until the final examination is taken. An "I" will automatically turn into an "F" if the student does not take the examination by the end of the following term (excluding Summer). If notification is not given, the student will be given a zero for a final examination grade and the final grade will be calculated according to the criteria shown above.

See Nuclear Medicine Student Handbook for other requirements.

**HCC Grading Scale**

A = 100- 90	4 points per semester hour
B = 89 - 80:	3 points per semester hour
C = 79 - 70:	2 points per semester hour
D = 69 - 60:	1 point per semester hour
59 and below = F	0 points per semester hour
IP (In Progress)	0 points per semester hour
W(Withdrawn)	0 points per semester hour
I (Incomplete)	0 points per semester hour
AUD (Audit)	0 points per semester hour

IP (In Progress) is given only in certain developmental courses. The student must re-enroll to receive credit. COM (Completed) is given in non-credit and continuing education courses. To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grades "IP," "COM" and "I" do not affect GPA.

See "Health Science Program/Discipline Requirements" for grading scale.

**Instructor  
Grading  
Criteria**

**COURSE GRADING SYSTEM**

Final grades will be submitted in terms of A, B, C, F.

- A = 90 - 100
- B = 80 - 89
- C = 75 - 79
- F = Below 75

The final grade will be determined by averages described:

Clinical evaluation of objectives by clinical instructors..... 45%

The student will be able to perform routine and non-routine diagnostic procedures to provide data for the detection or evaluation of various pathologic conditions using knowledge of patient preparation and procedures with at least 80% proficiency, using checklist evaluation forms. The student must successfully complete the minimum number of procedures for their assigned facility, as verified by proficiency check-off forms. Minimum being defined as 75% of the procedures on the facility's list and those performed independently or more than 4 times as supervised. The majority of the proficiency check-off must be for studies, not just quality assurance and injections. If the student does not complete 75% of this minimum number of studies with 80% proficiency he or she will be given an "F" for the course. If a student only completes 75-80% of the proficiencies, the student will receive a "C" for the course. Above 80% the grade will be averaged as shown here.

Clinical evaluation of objectives by clinical coordinator.... 26%

Accounting form	5%
Student Project	9%
Mid Term Exam	12%

Attendance .....20%

The point deduction for absences will be as follows:

- 1 day missed = - 5 point
- 2 days missed = - 10 points
- 3 days missed = - 15 points
- 4 days missed = - 20 points

Review & Reading Sessions .....9%

**Records Maintained By The Student In Each Practicum**

It is the responsibility of the student to maintain records of their progress in a practicum on three types of forms. The first is an Accounting Form which is filled out by the student and signed by the clinical instructor or supervising technologist. This form is used to account for every procedure performed by a student during his/her rotation in a hospital. These forms must be turned in to the Clinical Coordinator

weekly. If accounting forms are not turned in weekly, **6** points per week for each week of missing forms will be deducted from the mid-term or final exam, depending on the time of the semester. **Forms are due each Tuesday at noon.** Accounting forms are only checked in on Tuesdays.

The second form is a Physician's Participation form used during Reading Sessions. This form is to be signed and dated by the reading physician. There must be at least three cases on the form to be considered complete, with on more than two normal studies.. You should also not have more than two forms completed on any one day unless it is requested by the reading physician. **Eleven reading sessions** are required for this semester. These forms must be turned in bi-weekly. All forms must be turned in by the day of mid-term and final evaluations.

The third form is a timesheet. Students must sign in and out each day. The timesheet must remain at the clinical facility. If a student is sent home because of no patients or other administrative reasons, the student should sign out for the correct time but the clinical supervisor must initial the time.

Cell Phone: Cell phone must **not ring** in the clinical site. A cell phone may be in the possession of the student; but the student cannot answer the phone in the department or text. The student may obtain permission to leave the department, if the call is an emergency, to answer the call in an area where phones are permitted. A student may **NOT** text in the department. Violation of these policies may result in removal from a clinical site and possibly dismissal from the program.

#### **Radiation Dosimetry Badges:**

Each student is expected to return their radiation dosimetry badges at the beginning of each month. If a student loses a badge, the following penalties will be imposed: First loss = 5 points off the final exam and must complete paperwork with program RSO; Second loss = 10 points off final grade, must complete paperwork and must donate 4 hours of clerical work to the program office

#### **Instructional Materials**

The students are to refer to the clinical procedures at the assigned clinical facility and the program student handbook. The student will be tested over assignments and other relevant information given to them by the instructor of record and the clinical supervisor.

There will be **eleven** reading sessions required this semester, **one each week** beginning the second week of the semester.

## **HCC Policy Statement:**

**Access Student Services Policies on their Web site:** <http://hccs.edu/student-rights>

## **Distance Education and/or Continuing Education Policies**

**Access DE Policies on their Web site:** [http://de.hccs.edu/Distance\\_Ed/DE\\_Home/faculty\\_resources/PDFs/DE\\_Syllabus.pdf](http://de.hccs.edu/Distance_Ed/DE_Home/faculty_resources/PDFs/DE_Syllabus.pdf)

**Access CE Policies on their Web site:** <http://hccs.edu/CE-student-guidelines>

## **EGLS3 – Evaluation for Greater Learning Student Survey System**

At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time near the end of the term, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and department chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term.