



HOUSTON COMMUNITY COLLEGE
Coleman Center of Excellence

Course Syllabus

NMTT 2309 METHODOLOGY 1

CRN 12403, 12404 - Summer 2019

Coleman –Rm 284/Brookhaven -X3038D – Lecture/ 8:00 – 12:40 pm / Monday

Coleman/Brookhaven Lab/ 8:00 – 4:30pm /Wednesday

2 Lecture /5 Lab Hours /3 Credit Hours/ 96 Contact Hours per semester

8 weeks RT/ Face-to-Face Instruction/Web Enhanced

**Instructor
contact
information
(number
email
address)**

Vikki D. Littleton, MBA, CNMT 713-718-7398 vikki.davislittleton@hccs.edu

Pamela Alderman, MSRS, CNMT 972-860-4281 pamela.alderman@hccs.edu

**Office
Location
and Hours**

Coleman College for Health Sciences- suite 526 Mon 1 - 3 pm, Fri 12:30 - 3:30pm

Brookhaven Community College – X3022E Mon 1 - 3pm, Fri 8 - 11am

**Course
Description:**

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

**Course
Prerequisite**

PREREQUISITE(S):

NMTT 1409 with a minimum grade of C or better

**Course
Goal**

Prepare potential candidates for the Nuclear Medicine Technology field.

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

1. Perform nuclear medicine procedures with appropriate radiopharmaceuticals.
2. Identify normal and abnormal patterns of radiopharmaceutical distribution.
3. Cite procedure, medications and possible adverse reactions for various procedures.
4. Identify equipment and technical consideration for various procedures.

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

Perform nuclear medicine procedures with appropriate procedures.

1. List the main indications of performing in-vivo procedures.
2. State the preparations and procedures for performing in-vivo studies.

Identify normal and abnormal patterns and radiopharmaceutical distribution.

1. Identify normal, abnormal anatomy, physiology on a procedure scan.
2. Differentiate normal anatomy/physiology from abnormal pathology as seen on nuclear medicine images.

Cite procedures, medications and possible adverse reactions for various nuclear medicine procedures.

1. List the procedures and substances that may interfere with the performance of a nuclear medicine study.

Specify equipment required for performing nuclear medicine procedures.

1. List the equipment required to perform nuclear medicine procedures.

Identify technical consideration for various nuclear medicine procedures.

1. Discuss the different techniques utilized to attain data for clinical procedures.

SCANS

SCANS

and/or

Perform patient nuclear medicine procedures with appropriate radiopharmaceuticals.

Core

Foundation Skills–Basic-Reading

Curriculum

Identify normal and abnormal patterns of radiopharmaceutical distribution.

Competencies: If

Cite procedures, medications and possible adverse reactions for various nuclear medicine

procedures. Specify equipment required for performing nuclear medicine procedures. Identify technical consideration for various nuclear medicine procedures.

applicable

Workplace Competencies – Technology –Selects Technology

Instructional

Web-enhanced (49% or less) Face to Face

Methods

The material for this course will presented both in the classroom by lecture and the regularly scheduled laboratory session. Students are requested to read the assignment outlined in the syllabus prior to the class meeting. Examination questions will be taken from the reading assignments, the lab assignments, the procedure manual, and from the material presented during the lecture.

Students absent from class on the day of a quiz or major scheduled exam will not be given a make-up examination.

Student

Perform patient nuclear medicine procedures with appropriate radiopharmaceuticals.

Assignments

Discussions

Papers

Presentations

Homework Exercises

Reading

Identify normal and abnormal patterns of radiopharmaceutical distribution.

Discussions

Papers

Presentations

Homework Exercises

Reading

Cite procedures, medications and possible adverse reactions for various procedure.

Discussions

Papers

Presentations

Homework Exercises

Reading

Specify equipment and technical considerations required for performing nuclear medicine procedures.

Discussions

Homework Exercises

Readings

Student

Perform patient nuclear medicine procedures with appropriate radiopharmaceuticals.

Assessment(s)

In-class discussions

Quizzes/Tests which may include: definitions, matching, multiple choice, true/false, short answer, brief essay

Various assigned readings from textbooks

Identify normal and abnormal patterns of radiopharmaceutical distribution.

In-class discussions

Quizzes/Tests which may include: definitions, matching, multiple choice, true/false, short answer, brief essay

Various assigned readings from textbooks

Cite procedures, medications and possible adverse reactions for various nuclear medicine procedures.

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Various assigned readings from textbooks

Specify equipment and technical considerations for various procedures.

In-class discussions

Quizzes/Tests which may include: definitions, matching, multiple choice, true/false, Short answer, brief essay

Various assigned readings from textbooks

Syllabus Calendar

Week 1 - Anatomy/Physiology, Mechanical & Electrical Activity, CAD – Lecture
ECG – Cardiac /p. 491- 494, Textbook

Week 2 – Cardiac Assignment 1 & 2 /MUGA Processing/Quiz 1
Cardiac Rest/G-SPECT, RBC Labeling/Acquisition Quantification – Lecture
Textbook – p.511-516/PM 34

Week 3 – Myocardial Perfusion Imaging Viability Imaging/PET - Lecture
SPECT processing, Cardiac Assignment 3/Quiz 2
Textbook – p.494-509, 509-511/PM 36,37,39,40

Week 4 – Genitourinary & Adrenal Imaging Lecture
Research Adrenal Lab
Textbook p. 463, 556/PM 47, 64-67

Week 5 - Adrenal Imaging/Genitourinary Lab
Adrenal Lab/ Textbook p.463 PM 48
Genitourinary Imaging/Textbook p.556 PM 64 -67

Week 6 – Quiz 3 Adrenal/Renal – Lung Assignment
Thyroid/Parathyroid Lab/Endocrine System Lecture
Textbook- Parathyroid p.453 PM 48/Thyroid p.433 PM 49, 50, 52

Week 7 – Respiratory Imaging Lecture
Respiratory – Textbook Ch. 18, PM 72-75
Final Practicum –

Week 8 – Study Day – Monday
Final Exam

Instructors All class daily assignments and homework are to be completed and turned in on the due date.

Requirement No late assignments or homework will be accepted.

Case Studies and Grade Insurance Assignments will not be accepted late or Incomplete.

All students are expected to attend all classes in which they are enrolled. Attendance will be checked regularly by the instructor in the lecture and lab sessions. If a student has excessive absences, more than 12.5% of the total class time, they will be administratively withdrawn. If it is not possible to administratively withdraw the student, they will lose 1% for each occurrence from

their final grade.

The student must attend $\frac{3}{4}$ of the class to be considered as being present for each class. If a student enters the class more than thirty minutes after the class has begun or leaves more than thirty minutes early, they will be counted absent on the day. A student is considered tardy if they enter the class more than 5 minutes late. Three tardies will count as an additional absence. 1% will be deducted from the student overall final grade point average for all **UNEXCUSED ABSENCES**.

*****Faculty tutoring for individuals or groups can be scheduled from 8:00 - 8:45am on Monday and Wednesday morning. Class lecture and labs will begin at 9:00am on Monday and Wednesday. Please schedule by Friday morning of the preceding week.**

Cellphones are not allowed out during lecture or lab. If there is an emergency that requires the student's special attention, the student must inform the instructor at the beginning of the class period. Only during the time of an emergency will the student be allowed to have the cellphone out. The cell phone ringer must be off at all times. Any student not following the rules will receive a "0" during that class period.

I-Pads and Laptops are allowed, but can only be used to take notes and/or to view lectures. If the student is found to be using electronic equipment in any other manner during class, their privileges will be suspended for the entire semester. No smart watches allowed during testing. **There will not be any second chances.**

Program/ Discipline Students absent at the time a major exam or class quiz will **NOT MAKE-UP EXAMINATIONS or be allowed to take the exam at a later time during the class. If a student arrives late to a**

Requirements: If applicable **Major Exam and any student has completed the exam and left the examination room, the student will not be able to take the exam; even if other students who arrived on time are still remaining in the examination room.** All exams will have designated time periods, therefore all test papers must be terminated at the end of that time period. This policy is absolutely necessary in order to carry out all laboratory activities in the given time period and allow for fairness to all students present.

Any student absent from the classroom for a major scheduled exam will have the percent (%) value of that exam added to the percent value of the next MAJOR EXAM. For example: if the Midterm Exam was missed the % value would be added to the Final Exam and it would then be worth double. If the Final Exam is not taken or is missed, the student will receive a "0". A student can't take the Mid-term Exam and refuse to take the Final Exam and have Mid-term Exam calculated for both exams to try and maintain a high grade point average.

All time missed will count off in grading. However, **excused absences are 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). The student must provide documented evidence of the reason for missing the class, i.e.: a doctor's statement in the case of severe 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 the approval of the excused absence. The absence must not extend beyond the 12.5% of absences allowed in the course. If the student has missed over 12.5% of the class they will be administratively withdrawn from the class. If the student has missed less than 12.5% of the class the points will be deducted from the grade.

The student must provide documented evidence of the reason for missing the class, i.e.:

- a doctor's statement in the case of a **severe** personal illness
- the student's name and date on the court's documentation
- an accident report in the case of an accident
- An obituary or funeral program in the case of death in the immediate family to the instructor.

The Final Exam must be taken on the day and time designated by the instructor unless there is 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 or leave a message for Ms. Vikki or Ms. Pam on the day of the examination. The student must provide documented evidence of the reason for missing the examination (required evidence listed above). This documentation must be provided prior to taking a make-up exam.

The make-up exam must be taken within seven (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 Exam is taken, **if they have not exceeded four absences**. 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), see the student handbook. If notification is not given, the student will be given a zero for the Final Exam grade and the final grade will be calculated as described above.

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
	F=59 and below	0 points per semester hour
	IP (IProgress)	
	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	Final grades will be submitted in terms of A, B, C, D, F.
	A=90 -100
	B= 80 -89
	C=75-79
	D=60-74
	F= Below 60

The final grade will be determined by grades listed above, students must have a 75 or above to continue to next semester.

Mid-Term/Final Exams.....	50%
Quizzes.....	25%
Final Practicum.....	15%
Case studies/Assignments/Homework.....	10%

Attendance will be deducted from the final grade point average.

Instruction Nuclear Medicine and Pet/CT, 8th ed. Waterstram-Rich, Mosby, 2017
Materials Nuclear Medicine Procedure Manual 2012-2014, Klingensmith, Wich, 2012

HCC Policy Statement: ADA STATEMENT

HCCS recognizes its responsibility not to discriminate against anyone who has a documented disability that substantially limits one or more major life activities; has a record of such impairment; or is regarded as having an impairment. Specific policies have been established to enable students with documented disabilities who are otherwise qualified, to request accommodations which would allow them equal access to the College under Section 504 of the Rehabilitation Act of 1973 and under the Americans with Disabilities Act of 1990.

A *new*, updated letter of accommodation should be submitted to instructors within the first three days of each semester. Students who submit a letter of accommodation any time after the first three days of a semester should expect to begin receiving accommodations following a 24-hour time frame for instructors to implement new changes.

Obtaining reasonable accommodations is an interactive process that begins with the student's disclosure of his/her disability directly with the ADA Counselor in Ability Services. The ADA Counselor for the Coleman College is located in room.

For more information, please go to
<http://www.hccs.edu/district/students/disability-services/>

Academic Honesty

Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty.

"Scholastic dishonesty" includes, but is not limited to, cheating on a test, plagiarism and collusion.

"Cheating" on a test includes:

- Copying from another student's test paper;
- Using materials during a test that are not authorized by the person giving the test;
- Collaborating with another student during a test without authority;
- Knowingly using, buying, selling, stealing, transporting or soliciting in whole or part the contents of an un-administered test;
- Bribing another person to obtain a test that is to be administered.

"Plagiarism" means the appropriation of another's work and the unacknowledged incorporation of that work in one's own written work offered for credit.

"Collusion": means the unauthorized collaboration with another person in preparing written work offered for credit.

Possible punishments for academic dishonesty may include a grade of "0" or "F" on the particular assignment, failure in the course and/or recommendation for probation or dismissal from the College System. A recommendation for suspension or expulsion will be referred to the College Dean of Students for disciplinary disposition. Room 101 of the Learning Success Center (LSC).

3-peaters

The State of Texas encourages students to complete college without having to repeat failed classes. To increase student success, students who repeat the same course more than twice, are required to pay extra tuition. The purpose of this extra tuition fee is to encourage students to pass their courses and to graduate. Effective fall 2006, HCC has been charging a higher tuition rate to students registering the third or subsequent time for a course. If you are considering course withdrawal because you are not earning passing grades, confer with your instructor/counselor as early as possible about your study habits, reading and writing homework, test taking skills, attendance, course participation and opportunities for tutoring or other assistance that might be available.

Withdrawal Deadline

Access Student Services Policies on their Web site:

<http://www.hccs.edu/district/students/student-handbook/> A

TITLE IX STATEMENT:

Title IX of the Education Amendments of 1972 requires that institutions have policies and procedures that protect students' rights with regard to sex/gender discrimination. Information regarding these rights are on the HCC website under Students-Anti-discrimination. Students who are pregnant and require accommodations should contact any of the ADA Counselors for assistance.

It is important that every student understands and conforms to respectful behavior while at HCC. Sexual misconduct is not condoned and will be addressed promptly. Know your rights and how to avoid these difficult situations by logging in from your HCC student email account, go to www.edurisksolutions.org Go to the button at the top right that says **Login** and click. Enter your student number.

Sexual Misconduct

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex - including pregnancy and prenatal status - in educational programs and activities. If you require an accommodation due to pregnancy, please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX and Section 504), and complaints may be directed to:

David Cross
Director of EEO/Compliance
Office of Institutional Equity & Diversity
3100 Main
Houston, TX 77266-7517 or Institutional.Equity@hccs.edu

Basic Needs:

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable us to provide any resources that HCC may possess.

Campus Carry:

At HCC the safety of our students is our first priority. As of August 1, 2017, Houston Community College is subject to the Campus Carry Law (SB11 2015). For more information, visit the HCC Campus Carry web page at <http://www.hccs.edu/district/departments/police/campus-carry/>

HCC Online and/or Continuing Education Policies

All students are responsible for reading and understanding the HCC Online Student Handbook, which contains policies, information about conduct, and other important information. For the HCC Online Student Handbook click on the link below or go to the HCC Online page on the HCC website.

The HCC Online Student Handbook contains policies and procedures unique to the online student. Students should have reviewed the handbook as part of the mandatory orientation. It is the student's responsibility to be familiar with the handbook's contents. The handbook contains valuable information, answers, and resources,

such as HCC Online contacts, policies and procedures (how to drop, attendance requirements, etc.), student services (ADA, financial aid, degree planning, etc.), course information, testing procedures, technical support, and academic calendars. Refer to the HCC Online Student Handbook by visiting this link:

<http://www.hccs.edu/media/houston-community-college/distance-education/student-services/HCC-Online-Student-Handbook.pdf>

Access CE Policies on their Web site:

<http://www.hccs.edu/continuing-education/>

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