### Course Description:
Provides an overview of the field of nuclear medicine. Students will focus on medical terminology, the history of nuclear medicine, basic concepts of radiochemistry, radiation safety, medical law, patient care and positioning, and hospital administration. Field trips to nuclear medicine training facilities are included. Prerequisites: CHM 1033, 1033L; Corequisites: NMT 1312C, NMT 1705C, NMT 2613. (4 hr. lab)

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<thead>
<tr>
<th>Course Competency</th>
<th>Learning Outcomes</th>
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| **Competency 1:** Students will be able to demonstrate an understanding of patient care and safety by: | • Communication  
• Numbers / Data  
• Critical thinking  
• Cultural / Global Perspective  
• Ethical Issues  
• Computer / Technology Usage |

1. Describing the steps taken by the NM technologist to protect patients' belongings while she/he is in the Nuclear Medicine Department.  
2. Discussing the procedure to be followed when interviewing a patient for a NM procedure  
3. Describing the proper method for assisting a patient with a bedpan or urinal.  
4. Describing the correct manner of moving or transferring patients to prevent injury to the patient or NM technologist.  
5. Describing the correct positioning of a patient to maintain good body alignment.  
6. Discussing the use of pillows or sponges for assuring patient comfort and stability during procedures in the Nuclear Medicine Department.  
7. Discussing the proper use of safety straps, side rails and restraints in the NM Department.  
9. Stating three reasons for practicing proper body mechanics.  
10. Stating the leading cause of injury among health care workers.
11. Listing three rules for proper body mechanics.
12. Explaining the terms, "Center of Gravity" and "Base of Support."

**Competency 2:** Students will demonstrate an understanding of compliance by:

1. Identifying appropriate techniques used in the application of principles of time, distance, and shielding for radiation safety practices.
2. Naming and describing the various types of licenses for use of radioactive materials in medical practice.
3. Identifying Nuclear Regulatory Commission (NRC)/HRS regulations and placement on equipment and facilities.
4. Identifying and examining the various accrediting bodies and the roles and goals they play in national patient safety.

**Competency 3:** Students will be able to demonstrate an understanding of Nuclear Medicine Survey Meters by:

1. Describing the characteristics of an NMT Survey Meter.
2. Discussing and demonstrating the appropriate use of an NMT Survey Meter.
3. Performing quality control checks on the NMT Survey Meter.

**Competency 4:** Students will be able to discuss the elements of the history, evolution, and structure of the Nuclear Medicine profession by:

<table>
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<tr>
<th>Elements</th>
<th>Communication</th>
<th>Critical thinking</th>
<th>Information Literacy</th>
<th>Social Responsibility</th>
<th>Ethical Issues</th>
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<td>1. Listing the major scientists and their contributions that led to the development of the Nuclear Medicine profession as it exists today</td>
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<td>2. Discussing the concept of professionalism with regard to:</td>
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<td>• Serving the needs of society</td>
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<td>• Understanding the characteristics of professionalism</td>
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<td>• Behaving in a professional manner</td>
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<td>• Enhancing and promoting the professional image</td>
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<td>3. Discussing the role of the Society of Nuclear Medicine and importance of participation</td>
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Updated Spring 2021
4. Discussing the importance of participation in the Florida Society of Nuclear Medicine (FSNMT)
5. Discussing the roles of the American Registry of Radiologic Technologist (ARRT) and the Nuclear Medicine Technologist Certification Board (NMTCB) as they relate to the Nuclear Medicine profession and the requirements to have national certification
6. Discussing the role of Florida’s Department of Health as it relates to licensing of Nuclear Medicine Technologists
7. Identifying indications for performing Diagnostic Nuclear Medicine, the biorouting of radiopharmaceuticals commonly used in Nuclear Medicine.
8. Identifying medical informatics used in Nuclear Medicine.