NUCLEAR MEDICINE TECHNOLOGY (NMT)

NMT 3930 - Special Topics
Credit(s): 1-4 Credits (Repeatable for credit)

NMT 3980 - Independent Study
Credit(s): 1 or 3 Credits (Repeatable for credit)

NMT 4310 - Radiation Physics and Radiation Protection
Credit(s): 0 or 4 Credits
This course provides a study of atomic structure, radioactive decay modes, x-ray production, mathematics of decay, and interaction of radiation with matter. Radiation units, regulations regarding maximum permissible exposures to radiation, radiation monitoring and surveying, and principles of radiation protection are included in the content. Concepts in radiobiology and dosimetry are covered. Offered Fall semester only.

NMT 4320 - Radiochemistry/Radiopharmacy
Credit(s): 3 Credits
This course provides a study of basic radiopharmaceutical principles, generators, chemistry of radionuclides and their associated compounds, dosage forms, quality control and regulations. This course will include demonstrations and lab exercises in the radiopharmacy. Offered Fall semester only.

NMT 4330 - Nuclear Med Instrumentation
Credit(s): 3 Credits
This course provides a study of Nuclear Medicine Instrumentation that is based on the theory of radiation detection with application to current imaging instruments. Students will be introduced to tomographic imaging cameras, including SPECT and PET/CT, with their necessary quality control. This course will include demonstrations and lab exercises to reinforce concepts explained in the classroom. Offered Fall semester only.

NMT 4340 - Clinical Nuclear Medicine
Credit(s): 5 Credits
This course provides a study of the applications of radiopharmaceuticals used in diagnosis and therapy, different techniques and procedures utilized including indications for studies and correlation with various disease states. This course will also include concepts and applications dealing with patient care, the health care delivery systems, CPR, and health related agencies. Offered Fall semester only.

NMT 4350 - Nuclear Medicine Information Systems
Credit(s): 3 Credits
This course provides an introduction to basic hardware and software components of a computer system. Emphasis will be given to understanding basic computer principles with application to data acquisition and processing in nuclear medicine. Offered Fall semester only.

NMT 4410 - Imaging Clinical Practicum
Credit(s): 7 Credits (Repeatable for credit)
Students will perform in a wide variety of nuclear medicine procedures, including in vivo, diagnostic and therapeutic treatments in multiple clinical settings under the direct supervision of qualified medical professionals. Offered Spring semester only. NMT majors only.
Restrictions:
Enrollment is limited to students with a major in Nuclear Medicine Tech.

NMT 4420 - Radiopharmacy Clin. Practicum
Credit(s): 3 Credits (Repeatable for credit)
Students will prepare radiopharmaceuticals, perform associated quality control, dispense drugs and perform record keeping under the direct supervision of qualified medical professionals in a radiopharmacy setting. Offered Spring semester only. NMT majors only.
Restrictions:
Enrollment is limited to students with a major in Nuclear Medicine Tech.

NMT 4430 - Emerging Technologies
Credit(s): 3 Credits
This course is designed to introduce students to advanced imaging technologies and techniques. The course will include a study of cross sectional human anatomy. Offered Spring semester only.

NMT 4910 - Clinical Practicum
Credit(s): 0 Credits (Repeatable for credit)
This course is a continuation of NMT 4410. Students will perform in a wide variety of nuclear medicine procedures, including in vivo, diagnostic and therapeutic treatments in multiple clinical settings under the direct supervision of qualified medical professionals.

NMT 4930 - Special Topics
Credit(s): 3 Credits (Repeatable for credit)

NMT 4960 - Capstone in Nuclear Medicine
Credit(s): 1 Credit (Repeatable for credit)
Students enrolled in this course develop an individual research project that is a culmination of the knowledge obtained in the didactic and clinical coursework within the Nuclear Medicine Technology Program. This project is worked on independently with a faculty mentor and is required for graduation.

NMT 4980 - Independent Study
Credit(s): 1 or 3 Credits (Repeatable for credit)