

## **RADIOLOGIC TECHNOLOGY (RAD)**

**312. Introduction to CT and MR Imaging.** Credit 3 hours. Course will introduce basic principles and concepts of both CT and MR imaging beginning with the history and evolution of the modalities. Basic imaging techniques and computer applications will be discussed. The course will compare and contrast the capabilities of the two modalities.

**316. Cross sectional Anatomy.** Credit 3 hours. Prerequisites: Zoology 250 and 251. A study of the human anatomy in transverse axial, sagittal, coronal and oblique views as seen in CT & MR images. Anatomical systems covered include head, chest, abdomen, pelvis, vertebral column, central nervous system and musculoskeletal system.

**317. CT & MRI Safety & Advanced Patient Care.** Credit 4 hours. Prerequisite: Admission into the Health Studies Clinical Option. Topics include patient preparation, assessment, education, monitoring, infection control, venipuncture and medical emergencies. Patient and personnel radiation safety will also be discussed. Equipment safety, proper ancillary equipment, medical emergencies and handling the claustrophobic patient will also be discussed.

**413. Pathology & Pharmacology in CT & MRI.** Credit 3 hours. Prerequisites: Admissions into the Health Studies Clinical Option and NURS 313. Provides working knowledge of common pathologies and trauma conditions visualized in CT & MRI images. Allows students to adapt imaging protocols and patient care to non-routine procedures. Pathologies and traumas of all body systems will be covered. Pharmacologic agents commonly used in imaging will be discussed including biopharmaceutics, pharmacokinetics, pharmacodynamics of contrast agents and emergency medications.