

## **RADIOLOGIC TECHNOLOGY-CT (RADC)**

**411. CT Physics and Instrumentation.** Credit 3 hours. Prerequisite: Physical Science 101. Provides and understanding of the applied physics involved in Computed Tomography. Characteristics of radiation, tissue characteristics, interactions in the tissue, tube configuration, beam configuration and attenuation, detector types, equipment design and operation, Data Acquisition Systems (DAS), image display and quality control.

**414. CT Procedures.** Credit 3 hours. Prerequisite: Admission into the Health Studies Clinical Option. Course presents procedure protocols utilized in acquiring various images of anatomical systems using conventional, helical and multi-slice methods. Patient positioning, orientation, scan parameters and artifacts are discussed.

**419. CT Image Acquisition.** Credit 3 hours. Prerequisites: Physical Science 101 and RADC 411. Covers components of CT Imaging in depth. Designed to impart an understanding of the functions of Computed Tomography systems and associated computer applications in the acquisition, processing, reconstruction, reformatting and storage techniques of images. Images will be evaluated for quality.

**420. CT Clinical Practicum I.** Credit 5 hours. Prerequisites: Admission into the Health Studies Clinical Option. Course offers practical clinical experience sequentially, in conjunction with RADC 414. Course will provide opportunities to integrate and apply acquired knowledge of CT procedures in the clinical setting. Competency based assignments will be used to evaluate professional development.

**424. CT Clinical Practicum II.** Credit 5 hours. Prerequisites: Admission into the Health Studies Clinical Option and RADC 414 and RADC 420. A continuation of CT Clinical Practicum I. Offers practical clinical experience in obtaining competency in required CT procedures. Provides opportunities to integrate and apply acquired knowledge of CT procedures in the clinical setting. Competency based assignments will be used to evaluate professional development.