

RADIOLOGIC TECHNOLOGY-CT (RADC)

411. CT Physics and Instrumentation. Credit 3 hours. Prerequisites: PHSC 101 and admission into the Health Studies Clinical Option in Radiologic Technology. Provides an 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. (Spring)

414. CT Procedures. Credit 3 hours. Prerequisite: RADC 411. 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. (Spring)

419. CT Image Acquisition. Credit 3 hours. Prerequisite: 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. (Fall)

420. CT Clinical Practicum I. Credit 5 hours. Prerequisite: Permission of Department Head. Course offers practical clinical experience, in conjunction with RADC 414 and RADC 419. 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. (Fall)

424. CT Clinical Practicum II. Credit 5 hours. Prerequisite: Permission of Department Head. Course offers practical clinical experience, in conjunction with RAD 413 and RADC 420. 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. (Spring)