**Radiation Technology (RTCH)**

**Courses**

**RTCH 283. Basic Imaging. 2 Units.**
Covers basic imaging positioning used in radiology. Topics include: radiology positioning techniques and introduction to technical characteristics of common nuclear medicine studies.

**RTCH 283L. Radiation Clinical Basics Laboratory. 1 Unit.**
Hands-on laboratory experience that includes basic positioning, physics, and principles in radiology.

**RTCH 285. The Principles and Physics of Radiation. 4 Units.**
Covers equipment used to generate X-rays for production of radiographic images. Includes the physics of X-ray production, and interactions of X-rays with patient tissues to produce radiographic images. Stresses proper radiation safety for the patient and hospital personnel.

**RTCH 305. CT Fundamentals. 2 Units.**
Overview of computed tomography (CT) concepts, including cross-sectional anatomy, physics, and clinical procedures.

**RTCH 318. Imaging Modalities. 2 Units.**
Covers the correlation and relevance of nuclear medicine to the other imaging modalities. Topics include: cardiovascular, respiratory, gastrointestinal, genitourinary, and skeletal systems.

**RTCH 325. Applications for Managers. 2 Units.**
Introduces prospective radiology managers and administrators to the basic common applications found in health care.

**RTCH 385. Radiologic Trends in Health Care. 2 Units.**
A faculty-facilitated course that includes class discussion, group work, and presentation of projects utilizing the online learning environment. Focuses on current and future trends in the field of radiology.

**RTCH 387. Writing for Health-Care Professionals. 3 Units.**
Expands academic writing experience by building upon student’s prior study of health-care administration. Develops a variety of skills, including research and resume writing. Introduces elements of professional communications, such as memo writing, e-mail etiquette, and other types of formal writing for use in a professional work environment. Emphasizes student's public speaking skills through preparation of an oral presentation.

**RTCH 413. Management Practicum I. 3 Units.**
Observation of and discussion with selected administrative personnel in a radiology service. Emphasizes practical application of management theory. Projects assigned.

**RTCH 414. Management Practicum II. 3 Units.**
Observation of and discussion with selected administrative personnel in a radiology service. Emphasizes practical application of management theory. Projects assigned.

**RTCH 415. Radiation Emergency Procedures. 3 Units.**
Covers radiation emergency procedures and guidelines. Topics include: minor spills, major spills, airborne contamination, ingestion and inhalation contamination, firefighting techniques, X-ray injuries, and lessons learned from radiation disasters.

**RTCH 418. Health Information Management and Radiology Coding for Radiology Managers. 3 Units.**
Foundational course for prospective radiology managers and administrators that integrates health information management systems and radiology coding. Familiarizes the student with health information systems and provides them with a sound knowledge of radiology coding—showing how both relate to the smooth running of a radiology department. Introduces the most current guidelines in health information technology and provides students with the tools to better understand the concepts behind accurate coding and policy.

**RTCH 464. Moral Leadership. 4 Units.**
Methods of applying servant leadership to management and educational settings. Within a moral framework, discusses concepts of managing learners and professionals, assessing leadership style, the essence of leadership, leadership skill building, and conflict management. Utilizes assigned readings, discussions, papers, and personal inventories to aid in assessing the learner's leadership skills.

**RTCH 467. Management of a Radiologic Service. 3 Units.**
Techniques of organization, planning, and management, with specific applications to a hospital radiology service.

**RTCH 471. Applied Research Methods I. 2 Units.**
Applies research methods to radiation sciences. Directed experience with a research project. Laboratory.

**RTCH 472. Applied Research Methods II. 2 Units.**
Applies research methods to radiation sciences. Directed experience with a research project. Continues RTCH 471.

**RTCH 485. Digital Management in Radiology. 3 Units.**
A student-centered, faculty-facilitated course that is a continuation of RTCH 385. Class discussion, small-group work, and presentation of student projects/paper. New technology and its impact on the radiology department.

**RTCH 497. Advanced Clinical Experience. 2 Units.**
Advanced clinical experience in selected areas of professional practice.

**RTCH 499. Radiation Technology Independent Study. 0.5-2 Units.**
Student submits a project or paper on a topic of current interest in an area related to radiation technology. Regular meetings provide the student with guidance and evaluation. Elected on the basis of need or interest. The .5 unit of credit designed to offer directed experience in the prevention of AIDS and other communicable diseases in the clinical setting.

**RTCH 567. Leadership Theory and Practice. 3 Units.**
A Web-based course that focuses on the leadership aspect of communication. Examines leadership from a theoretical standpoint while relating, assessing, and applying leadership in present-day professional interactions.