

RAD 1113 FUNDAMENTALS OF RADIOLOGIC SCIENCE AND HEALTH CARE

Provides an overview of the foundations in radiography and the practitioner's role in the health care delivery system. Principles, practices and policies of health care organization(s) will be examined and discussed in addition to the responsibilities of the radiographer.

RAD 1124 PATIENT CARE PROCEDURES

Provides the basic concepts of patient care, including consideration for the physical and psychological needs of the patient and family. Routine emergency patient procedures will be described, as well as infection control procedures utilizing standard precautions. The role of the radiographer in patient education will be identified.

RAD 1234 BASIC RADIOGRAPHIC PROCEDURES

Provides a knowledge base necessary to perform standard radiographic procedures along with the application to special studies. Consideration will be given to the production of images of optimal diagnostic quality.

RAD 1334 BASIC RADIOGRAPHIC IMAGING AND ANALYSIS

Provides a knowledge base in factors that govern and influence the production and recording of radiologic images. Film and electronic imaging with related accessories will be emphasized. Also, analysis of the image including the importance of minimum imaging standards, evaluation and the factors that can affect image quality.

RAD 1343 BASIC CLINICAL PRACTICE

Clinical practice experiences designed to provide basic patient care and assessment, radiologic imaging and total quality management. The student will demonstrate basic skills that ensure the well-being of the patient preparatory to, during and following the radiologic procedures.

RAD 2113 IMAGING PHYSICS AND EQUIPMENT

This course will provide the student with an understanding of basic physics. Historical information will be presented, along with measurement units of the British and SI systems. General physical principles, atomic structure, structure of matter, electromagnetic radiation, electrostatics and magnetism will be included. Emphasis of the course will be on electrodynamics, electromagnetism, rectification, x-ray tubes, x-ray circuits, x-ray production and interactions with matter.

RAD 2223 RADIATION BIOLOGY AND PROTECTION

This course stresses the need for radiation protection for both the patient and technologist. The student will review the theories of cell biology, units of measure for ionizing radiation, types of ionizing radiation, radiation interaction with matter and learn the theories of biological effects of radiation, dose limitation guidelines, methods of detection and measurement and radiation protection regulations.

RAD 2235 ADVANCED RADIOGRAPHIC PROCEDURES

This course is designed to provide the student with the knowledge and skills necessary to perform standard and specialized projections of the cranium and human body. Consideration will be given to the production of radiographs of optimal diagnostic quality. Students will also be introduced to the basics of cross-sectional anatomy. Laboratory experience will be used to complement the classroom portion of the course.

RAD 2334 ADVANCED RADIOGRAPHIC IMAGING AND ANALYSIS

Besides providing the student with a comprehensive review of the basic radiographic imaging course, this course includes the related modalities, various types of radiographic equipment, exposure factor selection and modification and quality control procedures. Students will also have an introduction to ultrasound, radiation therapy and nuclear medicine.

RAD 2413 CAREER PREPARATION

This course is designed to provide students with opportunities to develop and practice skills necessary for successful employment. Topics of instruction include creating a portfolio, writing a resume and interviewing skills.

RAD 2433 ADVANCED CLINICAL PRACTICE

Students are assigned to clinical sites including the advanced areas where they continue practicing radiography and patient care under appropriate supervision. The course integrates sequential application, critical analysis and evaluation of concepts and theories in the performance of radiologic procedures. Clinical experiences provide opportunities for patient care and assessment, competent imaging performance and total quality management.

BIOL 1012 BIOLOGICAL AND MEDICAL TERMINOLOGY

Introduction to the use of Latin and Greek common roots, stems and combining forms in structuring biological and medical terminology. Prerequisites: [R] [Sci] MATH 0104

BIOL 1515 HUMAN ANATOMY AND PHYSIOLOGY

Structure and function of the human body. Emphasis is on the study of functions in the body and a basic knowledge of gross anatomy. Lecture: five hours per week. This course does not fulfill the anatomy and physiology requirements for the nursing program. Prerequisites: [R] [Sci] MATH 0104