Radiologic Technology

RADI 101 (5233) Introduction to Radiography, Ethics and Law Prerequisite: Acceptance into Radiography Program Credit Hours: 2

Introduction to health care with emphasis on radiologic technology. Principles of radiography, radiation protection, ethics, health records and information, and law will be presented. A two week orientation is also incorporated into this course.

RADI 103 (5234) Radiographic Procedures I Prerequisite: Acceptance into Radiography Program Credit Hours: 1

Content is designed to provide the knowledge base necessary to perform standard imaging procedures, including special studies. Consideration is given to the evaluation of optimal diagnostic images. In this course the radiographic positioning and anatomy of the chest and abdomen will be covered.

RADI 104 (5235) Radiographic Procedures II Prerequisite: RADI 103 Radiographic Procedures I Credit Hours: 3

Content is designed to provide the knowledge base necessary to perform standard imaging procedures, including special studies. Consideration is given to the evaluation of optimal diagnostic images. In this course the anatomy & positioning of the following body parts will be covered the upper extremity, shoulder girdle, lower extremity, pelvic girdle, and bony thorax.

RADI 105 (5236) Radiographic Procedures III

Prerequisite: RADI 104 Radiographic Procedures II

Credit Hours: 3

Content is designed to provide the knowledge base necessary to perform standard imaging procedures, including special studies. Consideration is given to the evaluation of optimal diagnostic images. In this course radiographic positioning of the skull, spine and special radiographic procedures will be included. Surgical, Mobile, Trauma, and Pediatric Radiographic techniques will also be covered.

RADI 107 (5237) Radiographic Imaging I

Prerequisite: Acceptance into Radiography Program

Credit Hours: 1

Introduction to clinical radiography including radiographic equipment design and use, radiation protection, image acquisition, and image processing.

RADI 109 (5237) Patient Care in Radiography I Prerequisite: Acceptance into Radiography Program Credit Hours: 2

Introduction to the care of patients while in the radiology department. Topics include: Body mechanics, patient transfer, patient assessment, and infection control.

RADI 113 (5240) Simulations in Radiography I Prerequisite: RADI 103 Radiographic Procedures I Credit Hours: 1

Laboratory study of the radiographic procedures used to visualize the anatomical structures of upper and lower xtremities, shoulder girdle, chest, abdomen, pelvic girdle, and contrast studies (Barium Swallow, UGI, and IVU)

RADI 115 (5472) Patient Care in Radiography II

Prerequisite: RADI 109 Patient Care in Radiography I

Credit Hours: 3

This course is designed to give the student a basic knowledge of vital signs and how they apply to the patient. It will introduce contrast media as well as the studies in which they could be used, which includes the digestive and urinary systems. It will also provide the basic concept of pharmacology and drug administration as they apply to the field of radiology.

RADI 117 (5239) Radiographic Imaging II Prerequisite: RADI 107 Radiographic Imaging I Credit Hours: 3

Content is designed to establish a knowledge base in factors that govern the image production process. Image quality and technical factors will be discussed in detail.

RADI 119 (5286) Clinical Training I

Prerequisite: RADI 103 Radiographic Procedures I

Credit Hours: 3

This portion of clinical training is used to acquaint the learner with the organization and function of healthcare facilities. In addition, the learner will observe and assist a practicing radiographer to appreciate both the ethical and technical responsibilities associated with radiologic technology. 20 hours a week for 15 weeks, for a total of 300 hours of clinical training.

RADI 120 (5370) Clinical Training II Prerequisite: RADI 119 Clinical Training I

Credit Hours: 3

This portion of clinical training encompasses major radiographic equipment, room maintenance and preparation, order requisition evaluation, principles of record keeping, proper patient handling. The learner should be making the transition from the passive mode of observation to a more active mode of assisting the radiographer perform examinations of the chest, abdomen, extremities, and contrast studies. 20 hours per week for 15 weeks

RADI 125 (5103) Principles of Radiation Physics and Equipment Operation

Prerequisite: RADI 117 Radiographic Imaging I

Credit Hours: 3

A basic knowledge of atomic structure and terminology. Also presented are the nature and characteristics of radiation, x-ray production, and the fundamentals of photon interactions with matter.

RADI 127 (5268) Introduction to Computed Tomography & Cross Sectional AnatomyPrerequisite: RADI 104 Radiographic Procedures IICredit Hours: 2This course explores the basic computed tomography concepts for the entry level radiographer.

RADI 201 (5248) Imaging Modalities (Online) Prerequisite: RADI 105 Radiographic Procedures III Credit Hours: 3

This course encompasses the concepts and applications within advanced modality areas of radiology, including: Magnetic Resonance Imaging, Mammography, Bone Densitometry, Ultrasound, Nuclear Medicine, PET, Radiation Therapy, and Angiography and Students will learn and practice techniques for building an effective resume and cover letter.

RADI 203 (5371) Clinical Training III Prerequisite: RADI 120 Clinical Training II Credit Hours: 3

During this portion of clinical training, the learner investigates fluoroscopic equipment and procedural duties. In addition, the learner will be introduced to the responsibilities and principles of scheduling patients for radiographic examinations. The learner should now be assisting with all radiographic examinations, and should be making the transition from a passive mode to a more active mode of performing skeletal and fluoroscopic examinations. 32 hours per week for 8 weeks (256 hours); 4 Weeks at Current Clinical Setting (128 hours) and 4 Weeks at New Clinical Setting (128 hours), Total Clinical Hours 256.

RADI 204 (5372) Clinical Training IV Prerequisite: RADI 203 Clinical Training III Credit Hours: 3 Emphasis is placed on skull radiography, trauma radiography, body section, mobile and surgical radiography, geriatric and pediatric radiography, and computed tomography procedures. Quality Assurance Management and Procedures will also be performed. 300 hours, 15 weeks.

RADI 205 (5373) Clinical Training V Prerequisite: RADI 204 Clinical Training IV Credit Hours: 3 Emphasis is placed on trauma emergency and special procedure radiography. In addition, the learner will be required to successfully complete the remaining category competency evaluations. 300 hours, 15 weeks.

RADI 207 (5104) Radiographic Imaging III Prerequisite: RADI 117 Radiographic Imaging II Credit Hours: 3

Content is designed to impart an understanding of the components, principles and operation of digital imaging systems found in diagnostic radiography. Factors that impact image acquisition, display, archiving and retrieval are discussed. Guidelines for selecting exposure factors and evaluating images within a digital system assist students to bridge between film-base and digital imaging systems. Principles of digital system quality assurance and maintenance are presented.

RADI 211 (5107) Computed Tomography Procedures

Prerequisite: RADI 127 Introduction to CT and Cross Sectional Anatomy

Credit Hours: 2

Studies the positional and functional relationships of body structures, with an emphasis on their appearances as seen with Computed Tomography (CT) scanning.

RADI 213 (5247) Radiographic PathophysiologyPrerequisite: Entrance into sophomore year of Radiography ProgramCredit Hours: 2Study of pathologies and their effects on the anatomy, physiology, and radiography of the human body.

RADI 214 (5229) Simulations in Radiography II
Prerequisite: RADI 113 Simulations in Radiology I
Credit Hours: 1
Laboratory study of the radiographic procedures used to visualize the anatomical structures of the bony thorax, spine, head and barium enema contrast study.

RADI 217 (5241) Radiation Protection I

Prerequisite: RADI 125 Principles of Physics & Equipment Operation

Credit Hours: 2

This course introduces radiation protection concepts as they apply to the patient. It encompasses the types of radiation, how radiation interacts with matter, radiation quantities and units, and radiation monitoring. It will explore the major differences between early and late tissue reactions.

*Refer to the Placement Testing Procedure 3.22, page 22 **Refer to Course Transfer, page 17

RADI 218 Radiation Protection II

Prerequisite: RADI 217 Radiation Protection I Credit Hours: 2

This course establishes a basic knowledge of radiation protection in the areas of dose limits, equipment design, management of radiation dose during diagnostic procedures, and the management of radiation dose to imaging personnel. Introduces an overview of cell biology and molecular and cellular radiation biology.

RADI 219 (5105) Image Analysis

Prerequisite: Entrance into Sophomore year of Radiography Program

Credit Hours: 2

Will provide a basis for analyzing radiographic images. Including the importance of imaging standards, discussion of a problem solving technique for image evaluation and factors that can affect image quality.

RADI 221 (5266) Radiography Comprehensive Review Prerequisite: Completion of all Radiography courses to date Credit Hours: 2

Group discussion on current topics in radiologic technology. Review of the principles of radiography and their application to the ARRT examination. Mock registry exams on the computer .

RADI 223 (5106) Critical Thinking and Analysis in Radiography

Prerequisite: Entrance into sophomore year of Radiography Program

Credit Hours: 3

Comprehensive review course with emphasis on critical thinking, problem analysis, and solution judgment skills. Includes group sessions for scenario development.

Religion

RELI 101 (1510) Comparative World Religions KRSN REL1010** Prerequisite: None Credit Hours: 3 This course examines different religions and their history, practices, and beliefs.

RELI 105 (1564) New Testament Survey KRSN REL1030**Prerequisite: NoneCredit Hours: 3An introduction to the New Testament and other early Christian literature in their historical and cultural context.

Respiratory Care

RESP 101 Fundamentals of Respiratory Care I

Prerequisite: Acceptance into the Respiratory Care program

Credit Hours: 3

This course provides instruction in basic gas physics and basic Respiratory Care. Included is a section on microbiology, patient assessment and professionalism.

RESP 102 Fundamentals of Respiratory Care II

Prerequisite: RESP 101 Fundamentals of Respiratory Care I, RESP 105 Respiratory Care Pharmacology, RESP 107 Cardiopulmonary Anatomy and Physiology I, and RESP 158 Fundamentals of Respiratory Care I Lab Credit Hours: 3

This course will continue from FRC I in presenting equipment and therapeutics. A diagnostics component will be added. The student will learn about specialized oxygen devices, arterial blood puncture analysis and interpretation, plus pulmonary function testing. In addition emergency care, artificial airways, and the electrical conduction system of the

*Refer to the Placement Testing Procedure 3.22, page 22 **Refer to Course Transfer, page 17