

# SUBJECTS AND COURSES

## COURSE DESCRIPTIONS - MEDICAL RADIOLOGIC TECH (RAD)

### **RAD 111 Intro to Radiography**

This course provides students with an overview of radiography and its role in health care delivery. Topics include the history of radiology, professional organizations, legal and ethical issues, health care delivery systems, introduction to radiation protection, and medical terminology. Upon completion students will demonstrate foundational knowledge of radiologic science. **NaN Credit Hours**

### **RAD 112 Radiography Procedures I**

This course provides the student with instruction in anatomy and positioning of the Chest and Thorax, Upper and Lower Extremities, and Abdomen. Theory and laboratory exercises will cover radiographic positions and procedures. Upon completion of the course the student will demonstrate knowledge of anatomy and positioning skills, oral communication and critical thinking in both the didactic and laboratory settings. **5 Credit Hours**

### **RAD 113 Patient Care**

This course provides the student with concepts of patient care and pharmacology and cultural diversity. Emphasis in theory and lab is placed on assessment and considerations of physical and psychological conditions, routine and emergency. Upon completion, students will demonstrate / explain patient care procedures appropriate to routine and emergency situations. **3 Credit Hours**

### **RAD 114 Clinical Education I**

This course provides the student with the opportunity to correlate instruction with applications in the clinical setting. The student will be under the direct supervision of a qualified practitioner. Emphasis is on clinical orientation, equipment, procedures, and department policies. Upon completion of the course, the student will demonstrate practical applications of specific radiographic procedures identified in RAD 112. **NaN Credit Hours**

### **RAD 122 Radiographic Procedures II**

This course provides the student with instruction in anatomy and positioning of spine, cranium, body systems and special procedures. Theory and laboratory exercises will cover radiographic positions and procedures with applicable contrast media administration. Upon completion of the course the student will demonstrate knowledge of anatomy and positioning skills, oral communication and critical thinking in both the didactic and laboratory settings. **5 Credit Hours**

### **RAD 124 Clinical Education II**

This course provides students with the opportunity to correlate previous instruction with applications in the clinical setting. Students will be under the direct supervision of a qualified practitioner. Practical experience in a clinical setting enables students to apply theory presented thus far and to practice radiographic equipment manipulation, radiographic exposure, routine radiographic positioning, identification, and patient care techniques. Upon completion of the course, students will demonstrate practical applications of radiographic procedures presented in current and previous courses. **NaN Credit Hours**

### **RAD 125 Imaging Equipment**

This course provides students with knowledge of basic physics and the fundamentals of imaging equipment. Topics include information on x-ray production, beam characteristics, units of measurement, and imaging equipment components. Upon completion, students will be able to identify imaging equipment as well as provide a basic explanation of the principles associated with image production. **NaN Credit Hours**

### **RAD 134 Clinical Education III**

This course provides students with the opportunity to correlate previous instruction with applications in the clinical setting. Students will be under the direct supervision of a qualified practitioner. Practical experience in a clinical setting enables students to apply theory presented thus far and to practice radiographic equipment manipulation, radiographic exposure, routine radiographic positioning, identification, and patient care techniques. Upon completion of the course, students will demonstrate practical applications of radiographic procedures presented in current and previous courses. **NaN Credit Hours**

### **RAD 135 Exposure Principles**

This course provides students with the knowledge of factors that govern and influence the production of radiographic images and assuring consistency in the production of quality images. Topics include factors that influence density, contrast and radiographic quality as well as quality assurance, image receptors, intensifying screens, processing procedures, artifacts, and state and federal regulations. **5 Credit Hours**

### **RAD 136 Radiation Protection/Biology**

This course provides the student with principles of radiation protection and biology. Topics include radiation protection responsibility of the radiographer to patients, personnel and the public, principles of cellular radiation interaction and factors affecting cell response. Upon completion the student will demonstrate knowledge of radiation protection practices and fundamentals of radiation biology. **NaN Credit Hours**

### **RAD 212 Image Evaluation & Pathology**

This course provides a basic understanding of the concepts of disease and provides the knowledge to evaluate image quality. Topics include evaluation criteria, anatomy demonstration and image quality with emphasis placed on a body system approach to pathology. Upon completion students will identify radiographic manifestations of disease and the disease process. Students will evaluate images in the classroom, laboratory and clinical settings. **2 Credit Hours**

### **RAD 214 Clinical Education IV**

This course provides students with the opportunity to correlate previous instruction with applications in the clinical setting. Students will be under the direct supervision of a qualified practitioner. Practical experience in a clinical setting enables students to apply theory presented thus far and to practice radiographic equipment manipulation, radiographic exposure, routine radiographic positioning, identification, and patient care techniques. Principles of computed tomography and cross-sectional anatomy will be presented. Upon completion of the course, students will demonstrate practical applications of radiographic procedures presented in current and previous courses. **NaN Credit Hours**

### **RAD 224 Clinical Education V**

This course provides students with the opportunity to correlate previous instruction with applications in the clinical setting. Students will be under the direct supervision of a qualified practitioner. Practical experience in a clinical setting enables students to apply theory presented thus far and to practice radiographic equipment manipulation, radiographic exposure, routine radiographic positioning, identification, and patient care techniques. Principles other imaging modalities will be presented. Upon completion of the course, students will demonstrate practical applications of radiographic procedures presented in current and previous courses. **NaN Credit Hours**

### **RAD 227 Review Seminar**

This course provides a consolidated and intensive review of the basic areas of expertise needed by the entry level technologist. Topics include basic review of all content areas, test taking techniques and job seeking skills. Upon completion the student will be able to pass comprehensive tests of topic covered in the Radiologic Technology Program. **NaN Credit Hours**

