## ASSOCIATE OF SCIENCE IN RADIOLOGIC TECHNOLOGY COURSE DESCRIPTIONS

**RT 101 Introduction to Radiologic Technology**
**Two semester hours**
*(Two hours theory per week)* This course is designed to provide the student with information regarding the radiologic technology profession. Cognitive information related to ethics, law, radiation protection and basic departmental procedures are presented to ensure safe clinical practice. Professional development and lifelong learning will be emphasized by introducing the students to various organizations and agencies.

**RT 105 Patient Care and Lab**
**Two semester hours theory and one semester hour lab**
*(Two hours theory and one hour laboratory per week)* This course presents the theoretical base for patient care skills and techniques unique to professional radiographers. Laboratory experiences will expand these theoretical foundations by incorporating psychomotor skills in a simulated and/or actual clinical setting. Student engagement will be emphasized using a required service experience.

**RT 110 Radiographic Procedures I and Lab**
**Three semester hours theory and one semester hour lab**
*(Three hours theory and two hours laboratory per week)* This course is the first part of a three-fold radiographic procedures course. Part I of this course is designed to provide the students with the necessary theory, concepts and psychomotor experiences needed to perform specific diagnostic procedures. Patient positioning, equipment manipulation, appropriate patient care techniques and critique of radiographic images are presented in this course. The body areas to be addressed in Part I include upper extremities, shoulder girdle, lower extremities, pelvis, chest, bony thorax, abdomen and spine.

**RT 120 Radiographic Exposures I and Lab**
**Three semester hours theory and one semester hour lab**
*(Three hours theory and one hour laboratory per week)* This two-fold course focuses on the theory, application and evaluation of the instrumentation and operation of radiographic equipment. Part I emphasizes the factors that produce and control radiographic images. Both film screen and digital technology will be covered.

**RT 125 Radiographic Exposures II and Lab**
**Three semester hours theory and one semester hour lab**
*(Three hours theory and one hour laboratory per week)* Part II is a continuation of RT 120 and emphasizes the various equipment and electronics involved in the production, use, control and evaluation of radiographic images. Darkroom processing and quality control will be explored.
***Prerequisite:*** *RT 120.*

**RT 140 Radiographic Procedures II and Lab**
**Three semester hours theory and one semester hour lab**
*(Three hours theory and two hours laboratory per week)* This course is the second part of a three-fold radiographic procedures course. Part II continues with headwork and the student will also be introduced to contrast and/or fluoroscopic procedures that evaluate the biliary system, upper and lower gastrointestinal system and urinary system.
***Prerequisite:*** *RT 110.*

**RT 245 Radiographic Procedures III**
**Two semester hours**
This course is the third part of a three-fold radiographic procedures course. Part III provides the student with an understanding of the more advanced and complex diagnostic procedures associated with a diverse patient population, pediatrics, trauma and surgical exams that include the use of a portable x-ray unit and c-arm. Clinical preparation will also be included in this course.
***Prerequisites:*** *RT 110 and RT 140.*

**RT 250 Radiographic Pathology**
**Two semester hours**
*(Two hours theory per week)* The course presents principles of pathology and the radiographic appearances of specific diseases. An understanding of disease processes can aid the technologist in selecting proper techniques and in determining the need for repeating a radiograph that might be acceptable under different circumstances. This knowledge will aid the Radiologic Technologist to become a more competent professional and a contributing member to the diagnostic imaging team.

**RT 260 Radiation Physics**
**Two semester hours**
*(Two hours theory per week)* This course is an in-depth study of the physics and electronics involved in the production, use and control of the various electromagnetic energies used in medical and diagnostic applications. The students will benefit from studying, examining and manipulating actual equipment components that facilitate comprehension of difficult concepts and applications.

**RT 265 Clinical Experience I**
**Four semester hours**
*(20 hours clinical experience per week for 14 weeks)* This course provides the student the opportunity to apply concepts learned in their first year of coursework in the performance of radiologic activities in the clinical setting. The student will be required to prove competency in prescribed examinations.

**RT 270 Radiation Biology**
**Two semester hours**
*(Two hours theory per week)* This course is a study and analysis of the effects of various types of electromagnetic radiations and their effects on living tissues. The students will learn why they should and how they can protect themselves, their patients and others from various forms of ionizing radiation used in diagnostic and therapeutic medical applications.

**RT 275 Clinical Experience II**
**Eight semester hours**
(*40 hours clinical experience per week for 15 weeks)* This course is a continuation of RT 265. The students will begin to refine skills learned in the previous clinical course, while expanding their expertise with additional procedures. The student will be expected to become more independent in performing imaging procedures. Additional competencies and re-checks will be required in prescribed examinations.
***Prerequisite:*** *RT 265.*

**RT 276 Pharmacology for Radiologic Technologists**
**Two semester hours**
*(Two hours theory per week)* This course introduces the students to the basic concepts of pharmacology, including legal and ethical issues surrounding the administration of these

agents. Venipuncture, administration of diagnostic agents, intravenous medications and the appropriate patient care during delivery will be addressed. Various contrast agents and other pharmacological agents utilized in the diagnostic imaging department will be discussed.

**RT 285 Clinical Experience III**
**Six semester hours**
*(40 hours clinical experience per week for 11 weeks and 30 hours classroom instruction for one additional week)* This course is a continuation of RT 275 and provides the student the opportunity to exercise independent judgment and discretion in the technical performance of medical imaging procedures. Students are expected to complete all required competencies in this rotation. The final section of clinical education ensures that the student is ready for employment. At the end of the clinical experience, all students are required to attend on-campus review sections (1 week/6 hours per day) that will prepare them for the ARRT examination. The required one-week review session will be utilized in calculating the cognitive portion of the student's grade for RT 285.
***Prerequisites:*** *RT 265 and RT 275.*

(top of pdf)
(back to catalog table of contents)