UTAH SYSTEM OF HIGHER EDUCATION

Utah System of Higher Education
Limited X-Ray Technician
FY2027 / 10 Credits (345 Clock-Hours)

Foundational Courses

TERT 1025 Radiographic Procedures and Patient Care **4 Credits / 120 Clock-Hours**

This course is designed to provide students with the knowledge and skills to take x-ray images of the chest, upper and lower limb, shoulder girdle, spine, skull, and podiatry exams. During this course students will practice taking x-rays, identifying anatomy and topical landmarks, and how to position the patient and the x-ray tube for each exam. Students will practice using post processing techniques when completing the entire process of start to finish when taking an x-ray.

Objectives:
• Demonstrate their anatomy and landmark knowledge of the chest, upper and lower limb, shoulder girdle, spine, skull.
• Simulate the routine and special positions and projections for the chest, upper and lower limb, shoulder girdle, spine, skull, and podiatry procedures in both the lecture and lab settings.
• Explain patient care procedures to be able to care for patients and their individual needs.
• Use medical terminology for body positions and imaging projections.
• Identify the safety protocols for each x-ray exam.

TERT 1035 Radiographic Core **3 Credits / 90 Clock-Hours**

This course is designed to teach students about x-ray imaging and exposure techniques, radiation protection, radiobiology, and radiographic physics. Students will learn how to use digital imaging techniques and post processing techniques in both the lab and in the classroom. This course will assist students in understanding the core methods of radiography.

Objectives:
• Describe the properties and characteristics of x-rays.
• Describe the equipment and components of an x-ray room.
• Demonstrate patient protection techniques to decrease the radiobiological risks.
• Demonstrate digital imaging and post processing techniques.
• Describe radiation physics and x-ray production circuits.
• Use the key features in the digital image process and in post processing.

TERT 1065 Limited X-Ray Technician Clinicals **3 Credits / 135 Clock-Hours**

This course is designed for students to take their knowledge of what they learned in the classroom and laboratory and apply it to their clinical site. Students will position patients, use proper radiation protection techniques, and take x-rays under the supervision of the x-ray department staff. Students will learn the job of an X-ray technologist through real world experiences.

Objectives:
• Use proper radiation protection techniques during each x-ray exam.
• Execute x-ray imaging exams from start to finish under the direction of the x-ray department staff.
• Select technical factors to produce quality diagnostic images with the mindset of ALARA.
• Provide patient-centered care for all patients regardless of age, gender, disability, special needs, ethnicity, or culture.
• Pass off X-ray competencies for the chest, upper and lower limb, shoulder girdle, spine, skull.