

RADIOLOGIC TECHNOLOGY (AHXR)

AHXR 100 - Intro to Diagnostic Imaging. 3 Credits.

Offered autumn. Offered at Missoula College. Introduction to the field of radiology and its mix of technical equipment, lab work, hospital environment, patient care and team work.

AHXR 121 - Radiographic Imaging I. 4 Credits.

Offered autumn. Offered at Missoula College. Introduction to fundamental physics principles underlying radiology and diagnostic x-ray production. Topics include electromagnetic waves, electricity and magnetism, electrical energy, and power and circuits as they relate to radiography. Factors of image quality and exposure methods: density, contrast, recorded detail, distortion, technique charts, manual and automatic exposure control, and tube rating charts.

AHXR 140 - Radiographic Methods. 3 Credits.

Offered autumn. Offered at Missoula College. Knowledge and skills necessary for quality patient care during standard and specialty radiographic procedures.

AHXR 141 - Radiology Lab. 1 Credit.

Offered at Missoula College. Co-Requisite AHXR 140, Radiological Methods. Students will practice all patient positioning skills necessary for competency as Radiologic Technologists.

AHXR 192 - Independent Study. 1-6 Credits.

Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

AHXR 195 - Radiographic Clinical: I. 1-14 Credits.

(R-20) Offered over two semesters throughout the Radiology Technology program, beginning Spring semester. Offered at Missoula College. Students will begin with an introduction to patient management and basic radiographic procedures. The final semester offers opportunities in advanced patient management skills and experience with highly skilled radiographic procedures. Each semester builds on the previous semester, always emphasizing the principles of ALARA.

AHXR 221 - Radiographic Imaging II. 3 Credits.

Offered spring. Offered at Missoula College. Offers students more technical and detailed information on the use of image receptor systems, processing principles, advanced digital imaging systems and imaging modalities used in radiology.

AHXR 225 - Radiobiology/Radiation Protctn. 2 Credits.

Offered spring. Offered at Missoula College. Principles of radiation protection and radio biology. Topics include the effects of ionizing radiation on body tissues, protective measures for limiting exposure to the patient and personnel, and radiation monitoring devices.

AHXR 240 - Radiological Methods II. 2 Credits.

Offered spring. Offered at Missoula College. Prereq., BIOH 201N/202 and BiOH 211N/212 Coreq., AHXR 241. Preparation in the procedures associated with radiology in standard radiographic environments.

AHXR 241 - Radiology Lab II. 1 Credit.

Offered spring. Offered at Missoula College. Prereq., BIOH 201N/202, and 211N/212, coreq., AHXR 240. Students will practice all patient positioning skills necessary for competency as Radiologic Technologists.

AHXR 270 - Radiographic Registry Review. 2 Credits.

Offered spring. Offered at Missoula College. An overview of imaging concepts as a review for the national certification test. Topics include a systematic approach for image evaluation, patient care, radiation protection and the physics of radiographic imaging.

AHXR 274 - Cross Sectional Anatomy. 3 Credits.

Course offered online each semester. Offered at Missoula College. Students must be ARRT certified with a current state license to register for the CT courses. This course will cover information specific to ARRT guidelines in preparation for the Computed Tomography Exam. The regions of the body to be included are: Head, Neck, Chest, Abdomen, Pelvis and Musculoskeletal. Within each of these categories, focus will be placed on these relevant factors. Sectional Anatomy (axial, sagittal and coronal planes), Contrast Media (types, contraindications, administration), Imaging Processes (scout acquisition and methods, parameter selection, protocol modification) and Special Procedures (Reformatting, 3-D rendering, biopsies/drains, screening).

AHXR 275 - Physics and Instrumentation. 2 Credits.

Course offered online each semester. Offered at Missoula College. Students must be ARRT certified with a current state license to register for the CT courses. This course will cover information specific to ARRT guidelines in preparation for the Computed Tomography Exam. The course will be broken down in to the following sections: Patient Assessment and Preparation (to include patient history, screening, and consent. Immobilization, patient monitoring, accessory medical devices, lab values and medications/dosage). Contrast Administration (to include contrast media types, considerations, administration and dosage, venipuncture, injection techniques, post-procedure care and adverse reactions). Radiation Safety and Dosimetry (to include technical factors, protection and shielding, dose measurement and dose reduction/optimization).

AHXR 291 - Special Topics. 1-6 Credits.

(R-6) Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

AHXR 295 - Radiographic Clinical: I. 8-24 Credits.

(R-20) Offered over two semesters throughout the Radiology Technology program, beginning Spring semester. Offered at Missoula College. Students will begin with an introduction to patient management and basic radiographic procedures. The final semester offers opportunities in advanced patient management skills and experience with highly skilled radiographic procedures. Each semester builds on the previous semester, always emphasizing the principles of ALARA.

AHXR 298 - Internship. 1 Credit.

Offered at Missoula College. Extended classroom experience which provides practical application of classroom learning during placements off campus.