RADIOLOGIC TECHNOLOGY (DMI)

DMI 102 (1 credit hours)
Medical Terminology for Radiography
Provides an introduction to the origins of medical terminology. Introduces a word-building system and discusses medical abbreviations and symbols. Introduces an orientation to understanding radiographic orders and diagnostic report interpretation and related terminology. Lecture: 1 credits (15 contact hours).
Pre-requisite: Admission to the radiography program.
Attributes: Technical
Components: LEC: Lecture

DMI 106 (3 credit hours)
Patient Care and Ethics for Radiographers
Provides the concepts of optimal patient care, including consideration for the physical and psychological needs of the patient and family. Describes routine and emergency patient care procedures, as well as infection control procedures using standard precautions. Identifies the role of the radiographer in patient education. Provides a foundation in ethics and law related to the practice of medical imaging. Examines a variety of ethical and legal issues found in clinical practice. Lecture: 2 credits (30 contact hours) Lab: 1 credits (30 contact hours).
Pre-requisite: Admission to the radiography program.
Attributes: Technical
Components: LAB: Laboratory, LEC: Lecture

DMI 108 (4 credit hours)
Radiographic Positioning & Procedures I
Provides the knowledge base necessary to perform imaging procedures of the upper extremities and shoulder girdle, lower extremities and pelvic girdle, bony thorax, chest, upper airway, and plain abdomen. Covers criteria for optimal diagnostic images, including anatomical structures shown, as well as corrective positioning action to be taken for sub-optimal images. Lecture: 2 credits (30 contact hours). Lab: 2 credits (60 contact hours).
Pre-requisite: Admission to the Radiography Program AND BIO 137.
Attributes: Technical
Components: LAB: Laboratory, LEC: Lecture

DMI 110 (1 credit hours)
Radiography Practicum I
Designed to sequentially develop, apply, critical analyze, integrate, synthesize and evaluate concepts and theories in the performance of radiologic procedures. Provides structured clinical experience through sequential competency-based assignments that focus on the upper and lower extremities, bony and visceral thorax, and abdomen. Practicum: 1 credit (90 contact hour).
Pre-requisite: Admission to the radiography program.
Attributes: Technical
Components: PCM: Practicum

DMI 112 (3 credit hours)
Principles of X-ray Production, Exposure, and Image Production
Establishes a basic knowledge of atomic structure and terminology. Presents the nature and characteristics of radiation, x-ray production and the fundamentals of photon interactions with matter. Establishes a knowledge base in factors that govern the image production process. Imparts an understanding of the components, principles and operation of digital imaging systems found in diagnostic radiology. Includes factors that impact image acquisition, display, archiving and retrieval are discussed. Lecture: 2 credits (30 contact hours). Laboratory: 1 credit (30 contact hours).
Pre-requisite: Admission to the Radiography Program AND MAT 150 or higher-level quantitative reasoning course.
Attributes: Technical
Components: LAB: Laboratory, LEC: Lecture

DMI 115 (2 credit hours)
Pharmacology for Radiographers
Provides basic concepts of pharmacology, venipuncture and administration of diagnostic contrast agents. Explains the classification and scheduling of drugs. Emphasizes the appropriate delivery of patient care during radiographic procedures requiring the administration of contrast agents. Lecture: 2 credit hours (30 contact hours).
Pre-requisite: DMI 106 and DMI 108.
Attributes: Technical
Components: LEC: Lecture

DMI 118 (4 credit hours)
Radiographic Positioning and Procedures II
Provides the knowledge base necessary to perform standard imaging procedures of the spine, cranium, facial bones, paranasal sinuses, upper gastrointestinal, lower gastrointestinal, and urinary system. Covers criteria for optimal diagnostic images, including anatomical structures shown, as well as corrective positioning action to be taken for sub-optimal images. Lecture: 3 credits (45 contact hours). Lab: 1 credit (30 contact hours).
Pre-requisite: DMI 108.
Attributes: Technical
Components: LAB: Laboratory, LEC: Lecture

DMI 120 (2 credit hours)
Radiography Practicum II
Continues the DMI 110 clinical experience. Designed to sequentially develop, apply, critical analyze, integrate, synthesize and evaluate concepts and theories in the performance of radiologic procedures. Provides structured clinical experience through sequential competency-based assignments that focus on the upper and lower extremities, bony and visceral thorax, abdomen, vertebral column, cranium, facial bones, and contrast studies of the digestive and urinary system. Practicum: 2 credits (180 contact hours).
Pre-requisite: DMI 110.
Attributes: Technical
Components: PCM: Practicum

DMI 128 (3 credit hours)
Radiographic Positioning and Procedures III
Provides the knowledge base and practical skills necessary to perform special diagnostic studies. Covers fluoroscopic procedures requiring informed consent, aseptic technique, and the administration of various contrast media. Considers the evaluation of optimal diagnostic images. Lecture: 2 credit hours (30 contact hours). Lab: 1 credit (30 contact hours).
Pre-requisite: DMI 108 & DMI 118.
Attributes: Technical
Components: LAB: Laboratory, LEC: Lecture

DMI 130 (2 credit hours)
Radiography Practicum III
Continues the DMI 120 clinical experience. Designed to sequentially develop, apply, critical analyze, integrate, synthesize and evaluate concepts and theories in the performance of radiologic procedures. Provides structured clinical experience through sequential competency-based assignments that focus on the upper and lower extremities, bony and visceral thorax, abdomen, vertebral column, cranium, facial bones, and contrast studies of the digestive and urinary systems, as well as surgical radiographic procedures. Practicum: 2 credits (180 contact hours).
Pre-requisite: DMI 120.
Attributes: Technical
Components: PCM: Practicum

DMI 212 (3 credit hours)
Radiographic Equipment and Quality Management
Establishes a knowledge base in design, construction requirement, functions and use of radiographic and fluoroscopic equipment, both fixed and mobile. Explains component and functions of various digital imaging processing and display systems. Provides a basic knowledge of quality control and federal regulation standards of operation for diagnostic radiographic equipment. Presents the principles of digital system quality assurance, quality and data management, and maintenance. Lecture: 2 credits (30 contact hours). Laboratory: 1 credit (30 contact hours).
Pre-requisite: DMI 112.
Attributes: Technical
Components: LAB: Laboratory, LEC: Lecture

DMI 220 (4 credit hours)
Radiography Practicum IV
Continues the DMI 130 clinical experience. Designed to sequentially develop, apply, critical analyze, integrate, synthesize and evaluate concepts and theories in the performance of radiologic procedures. Provides structured clinical experience through sequential competency-based assignments that focus on the upper and lower extremities, bony and visceral thorax, abdomen, vertebral column, cranium, facial bones, and contrast studies of the digestive and urinary systems, surgical radiographic procedures and special diagnostic procedures such as myelograms, arthrograms, hepatobiliary studies, and venography. Practicum: 4 credits (360 contact hours).
Pre-requisite: DMI 130.
Attributes: Technical
Components: PCM: Practicum

DMI 222 (2 credit hours)
Image Analysis
Provides a basis for analyzing radiographic images. Includes the importance of optimal imaging standards, discussion of a problem-solving technique for image evaluation and the factors that can affect image quality. Includes the analysis of actual radiographic images. Lecture: 2 credits (30 contact hours).
Pre-requisite: DMI 108 & DMI 118.
Attributes: Technical
Components: LEC: Lecture

DMI 224 (2 credit hours)
Radiation Protection and Biology for Radiographers
Presents an overview of the principles of radiation protection, including the responsibilities of the radiographer for patients, personnel and the public. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations are incorporated. Provides an overview of the principles of the interaction or radiation with living systems. Presents radiation effects on molecules, cells, tissues and the whole body. Introduces the factors affecting biological response are presented, including acute and chronic effects of radiation. Lecture: 2 credits (30 contact hours).
Pre-requisite: DMI 112.
Attributes: Technical
Components: LEC: Lecture

DMI 226 (3 credit hours)
Radiographic Anatomy & Pathology
Introduces concepts related to the classification of disease, etiology, epidemiology, treatment and prognosis. Delineates the appropriate imaging modality for the greatest diagnostic sensitivity. Describes the radiographic appearance of disease and its impact of exposure factor selections. Emphasized normal radiographic anatomy as an indicator and identification of pathologies. Lecture: 3 credits (45 contact hours).
Pre-requisite: DMI 108, DMI 118, and DMI 128.
Attributes: Technical
Components: LEC: Lecture

DMI 228 (3 credit hours)
Seminars in Radiography
Provides capstone information needed by the entry level radiographer; includes the radiography practitioner's role in the health care delivery system, continuing education and professional development, advanced modalities, accreditation organizations, national registration and state licensure, as well as the benefits of membership and activity in professional societies. Examines the principles, practices and policies of health care organizations and the delivery of health care in the United States. Lecture: 3 credits (45 contact hours).
Pre-requisite: Final semester in the radiography program.
Pre- or co-requisite: Complete DMI 212, 220, and 222 with "C" or better.
Attributes: Digital Literacy, Technical
Components: LEC: Lecture

DMI 230 (4 credit hours)
Radiography Practicum V
Continues the DMI 220 clinical experience. Designed to sequentially develop, apply, critical analyze, integrate, synthesize and evaluate concepts and theories in the performance of radiologic procedures. Provides structured clinical experience through sequential competency-based assignments that focus on the upper and lower extremities, bony and visceral thorax, abdomen, vertebral column, cranium, facial bones, and contrast studies of the digestive and urinary systems, surgical radiographic procedures and special diagnostic procedures such as myelograms, arthrograms, hepatobiliary studies, and venography. Practicum: 4 credits (360 contact hours).
Pre-requisite: DMI 220.
Attributes: Digital Literacy, Technical
Components: PCM: Practicum