

Program Number 4568

Program Name Froedtert School of Radiology



Date 7/22/2020

Radiography Curriculum Analysis

DIRECTIONS: Determine the course(s) in which each of the following content area is covered and enter the course number(s) and/or title(s). For guidance in what should be covered for each content area, please refer to the Radiography Curriculum (2017) published by the American Society of Radiologic Technologists.

Professional Curriculum	Program Course(s)
Introduction to Radiologic Science and Health Care	
The Health Science Professions	Intro to Rad Sci. & Health Care
The Health Care Environment	Intro to Rad Sci. & Health Care, Procedures I
Medical Terminology	Pre-Requisite Course
Medical Abbreviations and Symbols	Pre-Requisite Course
Procedures and Terminology	Procedures I-IV
Understanding Orders, Requests and Diagnostic Reports	Intro to Rad Sci. & Health Care
Hospital Organizations	Intro to Rad Sci. & Health Care
Radiology Organizations	Intro to Rad Sci. & Health Care, Rad. Protection,
Accreditation	Intro to Rad Sci. & Health Care, Seminar in Rad II
Regulatory Agencies	Rad. Protection, Seminar in Rad. II
Professional Credentialing	Intro to Rad Sci. & Health Care, Rad.
Professional Organizations	Intro to Rad Sci. & Health Care, Rad. Protection,
Professional Development and Advancement	Intro to Rad Sci. & Health Care
Ethics and Law in the Radiologic Sciences	
Ethics and Ethical Behavior	Intro to Rad Sci. & Health Care, Seminar in Rad I
Ethical Issues in Health Care	Seminar in Rad I
Legal Issues	Seminar in Rad I, Seminar in Rad II
Legal Doctrines and Standards	Seminar in Rad I
Patient Consent	Intro to Rad Sci. & Health Care

Professional Curriculum	Program Course(s)
Human Anatomy and Physiology	
Anatomical Nomenclature	Pre-Requisite Course
Chemical Composition	Pre-Requisite Course
Cell Structure and Genetic Control	Pre-Requisite Course
Metabolism	Pre-Requisite Course
Tissues	Pre-Requisite Course
Skeletal System	Procedures I-III
Muscular System	Pre-Requisite Course
Nervous System	Pre-Requisite Course
Sensory System	Pre-Requisite Course
Endocrine System	Pre-Requisite Course
Digestive System	Procedures I & II
Cardiovascular System	Procedures III
Lymphatic System and Immunity	Procedures III
Respiratory System	Procedures I
Urinary System	Procedures I & II
Reproductive System	Procedures I & III
Introduction to Sectional Anatomy	Cross Sectional Anatomy
Pharmacology and Venipuncture	
Drug Nomenclature	Seminar in Rad I
Drug Classification	Seminar in Rad I
General Pharmacologic Principles	Seminar in Rad I
Six Rights of Drug Safety	Seminar in Rad I
Drug Categories Relevant to Radiography (Uses and Impact on Patient)	Seminar in Rad I
Contrast Agents	Seminar in Rad I
Routes of Drug Administration	Seminar in Rad I
Venipuncture	Seminar in Rad I
Current Practice Status	Seminar in Rad I
Imaging Equipment	
X-ray Circuit	Rad Physics I, Imaging Equipment I
Radiographic Equipment	Rad. Protection, Principles of Imaging I & II, Procedures I, Imaging Equipment I, Seminar in Rad II, Rad Physics
Diagnostic X-ray Tubes	Rad. Protection, Procedures I, Principles I
Fluoroscopy	Rad. Protection, Procedures I, Principles II, Seminar II
Overview of Quality Control	Seminar in Rad II

Professional Curriculum	Program Course(s)
Radiation Production and Characteristics	
Structure of the Atom	Rad. Protection, Rad Bio
Nature of Radiation	Rad. Protection, Principles of Imaging I, Rad. Bio
X-ray Production	Principles of Imaging I
Interaction of Photons with Matter	Rad. Protection, Principles of Imaging I, Rad Bio
Principles of Exposure and Image Production	
Exposure Factors	Rad. Protection, Principles of Imaging I
Receptor Exposure	Principles of Imaging I & II
Differential Absorption	Principles of Imaging I & II
Spatial Resolution	Principles of Imaging II, Seminar in Rad II
Shape Distortion	Principles of Imaging II, Seminar in Rad II
Magnification	Rad. Protection, Principles of Imaging II
Beam Restriction	Rad. Protection, Principles of Imaging I
Beam Filtration	Rad. Protection, Principles of Imaging I
Scatter Radiation	Rad. Protection, Principles of Imaging I
Grids	Rad. Protection, Principles of Imaging, Seminar in Rad II
Exposure Factor Formulation	Principles of Imaging
Digital Image Acquisition and Display	
Image Acquisition	Digital Imaging
Initial Processing	Digital Imaging
Post Processing	Digital Imaging
Image Acquisition Errors	Digital Imaging
Quality Management	Digital Imaging Seminar in Rad II
Image Display	Digital Imaging
Data Management	Digital Imaging
Image Analysis	
Image Appearance Standards	Procedures I - III
Imaging Standards	Principles of Imaging I & II, Digital Imaging, Seminar in Rad II
Image Appearance Characteristics	Principles of Imaging I & II, Digital Imaging Seminar in Rad II
Procedural Factors	Procedures I - III
Corrective Action	Intro to Rad. Sci. & Health Care

Professional Curriculum	Program Course(s)
Radiation Biology	
Introduction	
	Rad. Protection, Rad Bio
Molecule	Rad. Protection, Rad Bio
Types of ionizing radiation	Rad. Protection, Rad Bio
Sources of medical radiation exposure	Rad. Protection, Rad Bio
Other sources of radiation exposure	Rad. Protection, Rad Bio
Radiation Energy Transfer	Rad. Bio
Radiation Effects	Rad. Protection, Rad Bio
Radiosensitivity and Response	Rad. Protection, Rad Bio
Radiation Protection	
Introduction	
Justification for radiation protection	Rad. Protection,
Potential biological damage of ionizing radiation	Rad. Protection, Rad Bio
Objectives of a radiation protection program	Rad. Protection,
Sources of radiation	Rad. Protection, Rad Bio
Legal and ethical responsibilities	Rad. Protection, Intro to Rad Sci & Health Care
Units, Detection and Measurement	Rad. Protection, Rad Bio
Surveys, Regulatory/Advisory Agencies and Regulations	Rad. Protection, Rad Bio
Personnel Monitoring	Rad. Protection,
Application	Rad. Protection,
Patient Protection	Rad. Protection,
Clinical Practice	
Clinical Practice	Orientation Week I, Clinical Education I- VI, Procedures I-IV
Procedural Performance	Orientation Week I, Clinical Education I- VI, Procedures I - IV
Clinical Competency	Clinical Education I- VI

Professional Curriculum	Program Course(s)
Patient Care in Radiologic Sciences	
Health Care Team	Intro to Rad Sci. & Health Care
Professionalism and Communication in Patient Care	Intro to Rad Sci. & Health Care, Rad. Protection, Procedures I
Patient/Radiographer Interactions	Intro to Rad Sci. & Health Care, Procedures I
Safety and Transfer	Intro to Rad Sci. & Health Care
Evaluating Physical Needs	Intro to Rad Sci. & Health Care
Infection Control	Seminar in Rad I
Medical Emergencies	Intro to Rad Sci. & Health Care
Trauma	Intro to Rad Sci. & Health Care, Procedures I - III
Reactions to Contrast Agents	Intro to Rad Sci. & Health Care, Seminar in Rad I
Tubes, Catheters, Lines and Other Devices	Intro to Rad Sci. & Health Care
Mobile and Surgical Radiography	Intro to Rad Sci. & Health Care, Rad. Protection, Procedures I
Radiographic Procedures	
Standard Terminology for Positioning and Projection	Procedures I
General Considerations	Intro to Rad Sci. & Health Care
Patient Considerations	Intro to Rad Sci. & Health Care
Positioning Considerations for Routine Radiographic Procedures	Procedures I - IV
Procedural Considerations for Contrast Studies	Procedures II & IV
Radiographic Pathology	
Definitions/Terminology	Radiographic Pathology
Causes of Disease (Process, Examples)	Radiographic Pathology
Radiologic Pathology (Definitions, Etiology, Examples, Sites, Complications, Prognosis, Radiographic Appearance, Procedural and Technical Considerations, Appropriate Imaging Modality)	Radiographic Pathology
Implications for Practice	Radiographic Pathology
Additional Modalities and Radiation Therapy	
Bone Densitometry	Imaging Procedures IV
Cardiac-interventional	Seminar in Rad I, Imaging Procedures IV
Computed Tomography	Seminar in Rad I, Imaging Procedures IV
Magnetic Resonance	Seminar in Rad I, Imaging Procedures IV
Mammography	Seminar in Rad I, Imaging Procedures IV
Medical Dosimetry	Imaging Procedures IV
Nuclear Medicine	Imaging Procedures IV
Radiation Therapy	Imaging Procedures IV
Ultrasound/Sonography	Imaging Procedures IV
Vascular-interventional	Seminar in Rad I, Imaging Procedures IV