

Directions:

Evaluate the student by entering the appropriate number to indicate the degree of competency. The rating for each task should reflect employability readiness rather than the grades given in class.

Student Rating Scale:

- 0 No Exposure** – no experience/knowledge in this area
- 1 Knowledge Received** – area is understood
- 2 Limited Skill** – has exposure, but additional training and supervision is required
- 3 Moderately Skilled** – limited training and supervision may be required, but progress is being made
- 4 Skilled** – no additional training is required; the competency has been mastered and knowledge can be transferred to other applications

0	1	2	3	4	A. Legal and Professional Responsibilities	Notes:
					1. Schedule exams	
					2. Sequence exams	
					3. Evaluate radiographic requisition	
					4. Explain client's rights (e.g., Bill of Rights and advanced directives)	
					5. Maintain client confidentiality	
					6. Maintain the department, institution, and personnel confidentiality	
					7. Obtain "informed" client consent	
					8. Verify client consent	
					9. Identify professional liability issues	
					10. Confirm the identity of the client	
					11. Use appropriate medical terminology	
					12. Compare clinical indications on request	
					13. Determine the need for additional projections	
					14. Modify routine procedures to client condition	
					15. Demonstrate professional ethics	
					Other:	

0	1	2	3	4	B. Client Education, Safety, and Comfort	Notes:
					1. Explain client preparation	
					2. Acquire client history	
					3. Verify client history	
					4. Verify client identity	
					5. Explain other imaging modalities (e.g., CT, MRI, and sonography)	

					6. Explain examination procedures	
					7. Provide post-procedure instructions	
					8. Assess client condition	
					9. Demonstrate proper body mechanics (e.g., transfers and lifting)	
					10. Provide for client needs (e.g., privacy, safety, and comfort)	
					11. Utilize appropriate immobilization devices	
					Other:	

0	1	2	3	4	C. Infection Control and Prevention	Notes:
					1. Wash hands	
					2. Follow Center for Disease Control (CDC) isolation	
					3. Clean and disinfect equipment	
					4. Dispose of contaminated equipment and materials (e.g., sharps and needles)	
					5. Demonstrate sterile technique	
					6. Identify modes of infection	
					7. Demonstrate types of precautions	
					Other:	

0	1	2	3	4	D. Client Monitoring	Notes:
					1. Monitor vital signs	
					2. Demonstrate proper use of equipment (e.g., EKG, oxygen, and blood pressure)	
					3. Document client status	
					4. Perform basic life support (BLS)	
					Other:	

0	1	2	3	4	E. Contrast Media	Notes:
					1. Confirm the type of contrast media for administration	
					2. Prepare contrast media for administration	
					3. Determine the appropriate dosage per department protocol	
					4. Monitor the client after administration to detect adverse reactions	
					5. Respond to the need for prompt medical attention	
					6. Administer emergency care	

					7. Administer the appropriate contrast media	
					Other:	

0	1	2	3	4	F. Client Protection	Notes:
					1. Explain the biological effects of radiation (e.g., dose-effect, long-term, somatic, genetic, and relative issue radio-sensitivities)	
					2. Utilize proper exposure techniques and client position to minimize repeat radiographs	
					3. Use the appropriate protective shielding	
					4. Demonstrate appropriate collimation	
					5. Identify the causes of repeat radiographs	
					6. Describe the effects of various equipment on client dose (e.g., imaging speed, grids, and filtration)	
					7. Use automatic exposure control (AEC) to minimize client dose	
					Other:	

0	1	2	3	4	G. Personnel Protection	Notes:
					1. Restrict unnecessary persons from remaining in the exposure area	
					2. Minimize occupational exposure	
					3. Use the appropriate protection shielding	
					4. Utilize the cardinal rules of radiation protection	
					5. Demonstrate the appropriate use of guidelines in fluoroscopy and portable units	
					6. Follow the current National Council on Radiation Protection (NCRP) guidelines	
					7. Utilize radiation safety and protection measures for the general public	
					Other:	

0	1	2	3	4	H. Radiation Exposure and Monitoring	Notes:
					1. Describe the basic properties and measurements of radiation	
					2. Wear personnel monitoring devices appropriately	
					3. Follow the current NCRP recommendations for personnel monitoring	
					4. Evaluate individual occupational exposure reports	
					Other:	

0	1	2	3	4	I. Radiographic Equipment	Notes:
					1. Describe the components and operations of basic radiographic units (e.g., X-Ray tube, automatic exposure control, manual exposure control, and beam restriction devices)	

					2. Describe the basic principles and operations of X-Ray generation, transformers, and rectification systems	
					3. Describe the basic principles and operations of a fluoroscopic unit	
					4. Describe the basic principles and operations of digital / electronic imaging units	
					5. Differentiate between the types of radiographic units	
					Other:	

0	1	2	3	4	J. Evaluation of Radiographic Equipment and Accessories	Notes:
					1. Perform Quality Assurance (QA) procedures to evaluate equipment calibration	
					2. Perform QA procedures to evaluate beam restriction	
					3. Perform QA procedures to evaluate image receptors	
					4. Perform QA procedures to evaluate shielding accessories	
					5. Perform appropriate corrective actions when malfunctions are identified	
					Other:	

0	1	2	3	4	K. Selection of Technical Factors	Notes:
					1. Demonstrate how each variable affects radiographic density	
					2. Demonstrate how each variable affects radiographic contrast	
					3. Demonstrate how each variable affects radiographic recorded detail	
					4. Demonstrate how each variable affects radiographic distortion	
					5. Select the appropriate film screen combination	
					6. Select the appropriate grid	
					7. Perform technique conversions	
					8. Demonstrate the proper use of a technique chart	
					9. Adjust exposure factors based on clinical considerations	
					10. Demonstrate appropriate use of automatic versus manual exposure control technique	
					Other:	

0	1	2	3	4	L. Image Processing	Notes:
					1. Discuss the origins of handling artifacts	
					2. Identify radiographic images properly	
					3. Load the image receptor properly	
					4. Describe the elements and functions of processor chemistry	

					5. Describe the elements and functions of the processor	
					6. Perform routine processor maintenance	
					7. Perform the appropriate corrective actions when processor malfunctions are identified	
					8. Process radiographic images	
					9. Process digital / electronic images	
					Other:	

0	1	2	3	4	M. Evaluation of Images	Notes:
					1. Evaluate images for diagnostic quality	
					2. Determine the causes of poor image quality	
					3. Perform the appropriate corrective actions when poor quality is identified	
					4. Evaluate images for anatomy and positioning	
					5. Evaluate images for pathology	
					Other:	

0	1	2	3	4	N. General Procedure Considerations	Notes:
					1. Demonstrate proper preparation of a client for an examination	
					2. Use proper terminology	
					3. Use the appropriate breathing instructions and motion control	
					4. Adapt techniques and positioning to clinical considerations	
					5. Identify human anatomy	
					6. Prepare the examination room for procedure	
					Other:	

0	1	2	3	4	O. Specific Imaging Procedures	Notes:
					Perform the following	
					<i>Thorax</i>	
					Chest, Routine	
					Chest, age 6 years or younger	
					Chest, wheelchair or stretcher	
					Chest, decubitus	
					Sternum	
					<i>Extremities</i>	
					Finger or Thumb	
					Hand	
					Wrist	
					Forearm	
					Elbow	
					Humerus	
					Shoulder	
					Foot	

					Ankle	
					Tibia and Fibula	
					Knee	
					Patella	
					Femur	
					Trauma Extremity	
					Extremity, age 6 years or younger	
					Scapula	
					Clavicle	
					Acromioclavicular Joints	
					Trauma Shoulder (for example, Y view or transthoracic)	
					Toes	
					Os Calcis	
					<i>Head and Neck</i>	
					Facial Bones	
					Nasal Bones	
					Paranasal Sinuses	
					Skull	
					Orbits	
					Zygomatic Arches	
					Mandible	
					Larynx (Soft Tissue Neck)	
					<i>Spine and Pelvis</i>	
					Cervical Spine	
					Trauma Cervical Spine (cross-table lateral)	
					Thoracic Spine	
					Lumbosacral Spine	
					Pelvis	
					Hip	
					Trauma Hip (cross-table lateral)	
					Scoliosis Series	
					Sacrum and/or Coccyx	
					Sacroiliac Joints	
					<i>Abdomen and GI Tract</i>	
					Esophagus Study	
					Abdomen, supine, and upright	
					Abdomen, decubitus	
					Upper GI series	
					Small Bowel Series	
					Barium Enema (single or double contrast)	
					<i>Other</i>	
					Intravenous Urography	
					Myelography	
					Cystography or Cystourethrography	
					Digital Fluoroscopy	
					Digital Radiography	
					<i>Mobile and Surgical</i>	
					Portable Chest	
					Portable Abdomen	
					Portable Orthopedics	
					C-Arm Procedure (surgical)	
					Operative Cholangiography	
					Retrograde Urography	

0	1	2	3	4	P. Leadership Competencies**	Notes:
					1. Demonstrate an understanding of SkillsUSA-VICA, its structure, and activities	

					2. Demonstrate an understanding of one's personal values	
					3. Perform tasks related to effective personal management skills	
					4. Demonstrate interpersonal skills	
					5. Demonstrate etiquette and courtesy	
					6. Demonstrate effectiveness in oral and written communication	
					7. Develop and maintain a code of professional ethics	
					8. Maintain a good professional appearance	
					9. Perform basic tasks related to securing and terminating employees	
					10. Perform basic parliamentary procedures in a group meeting	
					Other:	

****NOTE: These competencies are addressed in the Missouri SkillsUSA-VICA Curriculum Guide lessons**