

Function Number	Essential Functions (RADIOGRAPHY)
1	Confirm patient's identity.
2	Evaluate patient's ability to understand and comply with requirements for the requested examination.
3	Obtain pertinent medical history.
4	Manage complex interpersonal interactions within the workplace in an effective manner.
5	Explain and confirm patient's preparation (e.g., diet restriction, preparatory medication) prior to beginning
6	Review imaging examination request to verify accuracy and completeness of information (e.g., patient
7	Respond as appropriate to imaging study inquiries from patients.
8	Sequence imaging procedures to avoid residual contrast material affecting future exams.
9	Assume responsibility for medical equipment attached to patient's (e.g., IVs, oxygen) during the imaging
10	Follow environmental protection standards for handling and disposing of bio-hazardous materials (e.g.,
11	Provide for patient safety, comfort, and modesty.
12	Notify appropriate personnel of adverse events or incidents (e.g., patient fall, wrong patient imaged).
13	Communicate scheduling delays to waiting patients.
14	Explain procedure instructions to patient or patient's family.
15	Verify informed consent as necessary.
16	Recognize abnormal lab values relative to the imaging study ordered.
17	Communicate relevant information to others (e.g., MDs, RNs, other radiology personnel).
18	Explain procedure instructions to patient or patient's family.
19	Practice Standard Precautions.
20	Follow appropriate procedures when caring for patients with communicable diseases.
21	Use immobilization devices, as needed, to prevent patient movement and/or ensure patient safety.
22	Use proper body mechanics when assisting a patient.
23	Use patient transfer devices when needed.
24	Prior to administration of a medication other than a contrast agent, review information to prepare appropriate type and dosage.
25	Prior to administration of a contrast agent, review information to prepare appropriate type and dosage.
26	Prior to administration of a contrast agent, determine if patient is at risk for an adverse reaction.
27	Use sterile or aseptic technique when indicated.
28	Perform venipuncture.
29	Administer IV contrast agents.
30	Observe patient after administration of a contrast agent to detect adverse reactions.
31	Follow environmental protection standards for handling hazardous materials (e.g., chemotherapy IV, radioactive implant).
32	Obtain vital signs.
33	Recognize and communicate the need for prompt medical attention.
34	Administer emergency care.
35	Explain poste-procedural instructions to patient or patient's family.
36	Maintain confidentiality of patient information.
37	Clean, disinfect, or sterilize facilities and equipment, and dispose of contaminated items in preparation for next examination.
38	Document required information on patient's medical record (e.g., imaging procedure documentation, images). <ul style="list-style-type: none"> <li>a. On paper</li> <li>b. Electronically.</li> </ul>
39	Evaluate the need for and use of protective shielding.
40	Take appropriate precautions to minimize radiation exposure wo the patient.

41	Question female patient of child-bearing age about date of last menstrual period or possible pregnancy and take the appropriate action (e.g., document response, contact physician).
42	Restrict beam to the anatomical area of interest.
43	Set technical factors to produce diagnostic images and adhere to ALARA.
44	Document radiographic procedure dose.
45	Select continuous or pulsed fluoroscopy.
46	Document fluoroscopy time.
47	Document fluoroscopy dose.
48	Prevent all unnecessary personnel from remaining in area during x-ray exposure.
49	Take appropriate precautions to minimize occupational radiation exposure.
50	Advocate radiation safety and protection.
51	Describe the potential risk of radiation exposure when asked.
52	Wear a personnel monitoring device while on duty.
53	Evaluate individual occupational exposure reports to determine if values for the reporting period are within established limits.
54	Determine appropriate exposure factors using the following: <ul style="list-style-type: none"> <li>a. Fixed kVp technique chart</li> <li>b. Variable kVp technique chart</li> <li>c. Calipers (to determine patient thickness for exposure)</li> <li>d. Anatomically programmed technique</li> </ul>
55	Select radiographic exposure factors: <ul style="list-style-type: none"> <li>a. Automatic Exposure Control (AEC)</li> <li>b. kVp and mAs (manual)</li> </ul>
56	Operate radiographic unit and accessories including: <ul style="list-style-type: none"> <li>a. Fixed unit</li> <li>b. Mobile unit (portable)</li> </ul>
57	Operate fluoroscopic unit and accessories including: <ul style="list-style-type: none"> <li>a. Fixed fluoroscopic unit</li> <li>b. Mobile fluoroscopic unit (C-arm)</li> </ul>
58	Operate electronic imaging and record keeping devices including: <ul style="list-style-type: none"> <li>a. Computed radiography (CR) with photostimulable storage</li> <li>b. Direct radiography (DR)</li> <li>c. Picture archival and communication system (PACS)</li> <li>d. Hospital information system (HIS)</li> <li>e. Radiology information system (RIS)</li> <li>f. Electronic medical record (EMR)</li> </ul>
59	Modify technical factors to correct for noise in a digital image.
60	Remove all radiopaque material from patient or table that could interfere with the image (e.g., clothing removal, jewelry removal).
61	Perform post-processing on digital images in preparation for interpretation.
62	Use radiography anatomical side markers at the time of image acquisition.
63	Add electronic annotations on digital images to indicate position or other relevant information (e.g., time, upright, decubitus, post-void).
64	Select equipment and accessories (e.g., grid, compensating filter, shielding) for examination requested.
65	Explain breathing instructions prior to making the exposure.
66	Position patient to demonstrate the desired anatomy using anatomical landmarks.

67	Modify exposure factors for circumstances such as involuntary motion, casts and splints, pathological conditions, contrast agent, or patient's inability to cooperate.
68	Verify accuracy of patient identification on image.
69	Evaluate images for diagnostic quality.
70	Respond appropriately to digital exposure indicator values.
71	Determine corrective measure if image is not of diagnostic quality and take appropriate action.
72	Identify image artifacts and make appropriate corrections as needed.
73	Store and handle image receptor in a manner which will reduce the possibility of artifact production.
74	Visually inspect, recognize, and report malfunctions in the imaging unit and accessories.
75	Recognize the need for periodic maintenance and evaluation of radiographic equipment affecting image quality and radiation safety (e.g., shielding, image display monitor, light field, central ray, detector calibration).
76	Perform routine maintenance on digital equipment including: <ul style="list-style-type: none"> <li>a. Detector calibration</li> <li>b. CR plate erasure</li> <li>c. Equipment cleanliness</li> <li>d. Test images</li> </ul>
77	Adapt radiographic and fluoroscopic procedures for patient condition (e.g., age, size, trauma, pathology) and location (e.g., mobile, surgical, isolation).
78	Select appropriate geometric factors (e.g., SID, OID, focal spot size, tube angle).
79	<p>Position patient, x-ray tube, and image receptor to perform the following diagnostic examinations:</p> <p><b>CHEST &amp; THORAX</b></p> <ul style="list-style-type: none"> <li>a. Chest</li> <li>b. Ribs</li> <li>c. Sternum</li> </ul> <p><b>UPPER EXTREMITY</b></p> <ul style="list-style-type: none"> <li>a. Fingers</li> <li>b. Hand</li> <li>c. Wrist</li> <li>d. Forearm</li> <li>e. Elbow</li> <li>f. Humerus</li> <li>g. Shoulder</li> <li>h. Scapula</li> <li>i. Clavicle</li> <li>j. Acromioclavicular joints</li> </ul> <p><b>LOWER EXTREMITY</b></p> <ul style="list-style-type: none"> <li>a. Toes</li> <li>b. Foot</li> <li>c. Calcaneus</li> <li>d. Ankle</li> <li>e. Tibia/fibula</li> <li>f. Knee/patella</li> <li>g. Femur</li> </ul> <p><b>HEAD</b></p> <ul style="list-style-type: none"> <li>a. Skull</li> <li>b. Facial bones</li> <li>c. Mandible</li> </ul>

79	<p>d. Zygomatic arch  e. Temporomandibular joints  f. Nasal bones  g. Orbits  h. Paranasal sinuses</p> <p>SPINE &amp; PELVIS  a. Cervical spine/soft tissue neck  b. Thoracic spine  c. Scoliosis series  d. Lumbar spine  e. Sacrum/coccyx  f. Sacroiliac joints  g. Pelvis/hip</p> <p>ABDOMEN &amp; GI TRACT  a. Abdomen  b. Esophagus  c. Swallowing dysfunction study  d. Upper GI series, single or double contrast  e. Small bowel series  f. Contrast enema (e.g., barium, iodinated) single or double contrast</p> <p>OTHER  a. Surgical cholangiography  b. ERCP  c. Cystography  d. Cystourethrography  e. Intravenous urography  f. Retrograde urography  g. Hysterosalpingography  h. Bone survey  i. Long bone measurement  j. Bone age</p> <p>Assist radiologist with the following invasive procedures:  a. Joint injection (arthrography)-fluoroscopy guided contrast injection  b. Myelography-fluoroscopic guided contrast injection</p>
80	Perform in surgical and trauma situations.
81	Perform radiographic exams in difficult and stressful patient care situations.

Physical Factors	YES	NO	Essential Function/s Numbers
Standing	●		1, 2, 3, 4, 5, 6, 7, , 11, 19, 20, 21, 22, 23, 24, 34, 37, 38, 56, 57, 66, 76, 77, 79, 80, 81
Walking	●		1, 2, 3, 4, 5, 6, 7, 11, 19, 20, 21, 22, 23, 24, 37, 38, 56, 57, 79, 80, 81
Sitting	●		1, 2, 3, 4, 5, 6, 7, 19, 20, 21, 22, 23, 24, 34, 37, 38
Lifting 10 lbs.	●		19, 20, 21, 22, 23, 34, 37, 56, 57, 73, 76, 79, 80, 81
20 lbs.	●		19, 20, 21, 22, 23, 34, 37
50 lbs.	●		34, 37, 79
100 lbs.		●	
100 lbs. +		●	
Carrying 10 lbs.	●		19, 20, 21, 22, 23, 34, 37, 73, 76, 79, 80, 81
20 lbs.	●		19, 20, 21, 22, 23, 34, 37
50 lbs.	●		34, 37
100 lbs.		●	
100 lbs. +		●	
Pushing/Pulling 10 lbs.	●		11, 34, 37, 56, 57, 79, 80, 81
20 lbs.	●		11, 34, 37, 56, 57, 79, 80, 81
50 lbs.	●		11, 34, 37, 56, 57, 77, 79, 80, 81
100 lbs.	●		
100 lbs. +		●	
Climbing		●	
Balancing		●	
Bending	●		11, 19, 20, 21, 22, 23, 34, 37, 76, 79, 80, 81
Stooping	●		11, 19, 20, 21, 22, 23, 34, 37, 56, 57, 76, 79, 80, 81
Crouching	●		11, 34, 37, 56, 57, 79, 80, 81
Kneeling	●		11, 79, 80, 80, 81 34, 37, 56, 57
Crawling		●	
Running		●	
Touch Characteristics ( e.g. size, shape, texture)	●		9, 10, 19, 20, 21, 22, 23, 24, 32, 34, 37, 38, 54, 55, 56, 57, 73, 76, 79
Vibration/palpation	●		32, 34, 37, 56, 57, 66, 79, 80, 81
Temperature		●	19, 20, 32
Twisting	●		11, 19, 20, 21, 22, 23, 34, 37, 56, 57, 79, 80, 81
Turning	●		11, 19, 20, 21, 22, 23, 34, 37, 56, 57, 79, 80, 81
Jumping		●	
Grasping-Firm/Strong	●		9, 11, 19, 20, 21, 22, 23, 24, 28, 29, 34, 37, 56, 57, 77, 79, 80, 81
Grasping-Light	●		9, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 34, 37, 56, 57, 79, 80, 81
Finger Dexterity	●		9, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 32, 34, 37, 38, 54, 55, 56, 57 66, 67, 70, 71, 79, 80, 81
Reaching Forward	●		9, 11, 19, 20, 21, 22, 23, 24, 34, 37, 56, 57, 79, 80, 81
Reaching Overhead	●		9, 19, 20, 21, 22, 23, 24, 34, 37, 56, 57, 77, 79, 80, 81
Pinching	●		19, 20, 21, 22, 23, 24, 34, 37, 56, 57

Simultaneous use of hand, wrist, fingers (e.g. typing, data entry)	•		1, 3, 6, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 32, 34, 37, 38, 54, 55, 56, 57, 58, 61, 63, 66, 67, 79, 80, 81
Coordination Eye-hand	•		1, 3, 6, 9, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 32, 34, 37, 38, 54, 55, 56, 57, 66, 67, 69, 71, 76, 77, 78, 79, 80, 81
Eye-hand-foot	•		19, 20, 21, 22, 23, 24, 34, 37, 56, 57
Driving	•		19, 20, 21, 22, 23, 24, 37, 56, 57
Vision Acuity, Near	•		1, 2, 3, 5, 6, 7, 9, 15, 16, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 37, 38, 39, 40, 53, 54, 56, 57, 66, 67, 68, 69, 71, 72, 73, 74, 76, 77, 79, 80, 81
Acuity, Far		•	19, 20, 21, 22, 23, 24, 30
Depth perception	•		19, 20, 21, 22, 23, 24, 34, 37, 39, 40, 56, 57, 79, 80, 81
Accommodation	•		1, 2, 3, 4, 5, 6, 7, 19, 20, 21, 22, 23, 24, 34, 37, 39, 40, 56, 57
Color vision	•		19, 20, 21, 22, 23, 24, 34, 37, 38, 39, 40, 56, 57
Field of vision	•		1, 2, 3, 5, 6, 7, 19, 20, 21, 22, 23, 24, 34, 37, 38, 39, 40, 56, 57, 79, 80, 81
Hearing Face-to-face conversation	•		1, 2, 3, 4, 5, 6, 7, 12, 13, 14, 15, 17, 18, 20, 21, 22, 23, 24, 26, 33, 34, 35, 36, 54, 56, 57, 58, 60, 65, 74, 79, 80, 81
Verbal conversation with others	•		1, 2, 3, 4, 5, 6, 7, 12, 13, 14, 15, 17, 18, 20, 21, 22, 23, 26, 33, 34, 35, 36, 39, 40, 51, 52, 54, 56, 57, 60, 65, 74, 79, 80, 81
Public speaking		•	
Hear normal conversation	•		1, 2, 3, 4, 5, 6, 7, 12, 13, 14, 15, 17, 18, 20, 21, 22, 23, 24, 33, 34, 35, 36, 56, 57, 74, 79, 80, 81
Hear telephone conversation	•		1, 2, 3, 4, 5, 6, 7, 12, 13, 14, 15, 17, 18, 20, 24, 33, 38, 56, 57, 74

<b>Environmental Factors</b>	<b>YES</b>	<b>NO</b>	<b>Essential Function/s Number</b>
Works indoors	•		11, 17, 18, 19, 20, 21, 22, 23, 24, 34, 37, 38, 39, 40, 54, 55, 56, 57, 79, 80, 81
Works outdoors		•	
Exposure to extreme hot or cold temp		•	
Working at unprotected heights		•	
Being around moving machinery	•		19, 20, 21, 22, 23, 34, 37, 40, 56, 57
Exposure to marked changes in		•	
Exposure to dust, fumes, smoke, gases, odors,	•		19, 34, 37, 39, 40, 56, 57
Exposure to toxic or caustic Chemicals	•		19, 20, 24, 31, 34, 37, 39, 40, 56, 57
Exposure to excessive noises		•	
Exposure to radiation or electrical energy	•		19, 20, 21, 22, 23, 34, 37, 39, 40, 52, 56, 57
Exposure to solvents, grease, or oils		•	
Exposure to slippery or uneven walking		•	
Working in confined spaces	•		19, 20, 21, 22, 23, 34, 37, 38, 56, 57

Using computer monitor	•		16, 17, 18, 20, 21, 23, 24, 35, 36, 38, 54, 55, 56, 57, 58, 61, 63, 69, 75, 76
Working with explosives		•	
Exposure to vibration		•	
Exposure to flames or burning items		•	
Works around others	•		9, 11, 12, 13, 17, 18, 19, 20, 21, 22, 23, 24, 34, 37, 38, 39, 40, 54, 55, 56, 57, 79, 80, 81
Works alone	•		9, 11, 12, 13, 19, 20, 21, 22, 23, 24, 34, 37, 38, 39, 40, 54, 55, 56, 57, 61, 79, 80, 81
Works with others	•		9, 11, 12, 13, 17, 18, 19, 20, 21, 22, 23, 24, 28, 33, 33, 34, 35, 36, 37, 38, 39, 40, 56, 57, 61, 65, 66, 79, 80, 81
Safety Equipment (Required to wear) Safety glasses	•		19, 20, 37, 64, 79, 80, 81
Face mask/face shield	•		9, 10, 19, 20, 27, 28, 34, 37, 39, 56, 57, 79, 80, 81
Ear plugs		•	
Hard Hat		•	
Protective Clothing	•		9, 10, 19, 20, 27, 28, 34, 37, 39, 40, 56, 57, 64, 79, 80, 81

<b>Cognitive/Mental Factors</b>	<b>YES</b>	<b>NO</b>	<b>Essential Function/s Number</b>
Reasoning Deal with abstract and concrete variables, define problems, collect data, establish facts, and draw valid conclusions	•		1, 2, 3, 4, 5, 6, 7, 8, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 33, 34, 35, 36, 37, 38, 56, 57, 59, 61, 66, 67, 69, 70, 71, 72, 74, 77, 78, 79, 80, 81
Interpret instructions furnished in oral, written, diagrammatic, or schedule form	•		1, 2, 3, 5, 6, 7, 8, 17, 18, 19, 20, 21, 22, 23, 24, 33, 34, 35, 36, 37, 38, 50, 51, 52, 53, 54, 56, 57, 59, 61, 79, 80, 81
Deal with problems from standard situations	•		1, 2, 4, 5, 6, 7, 8, 12, 13, 17, 18, 19, 20, 21, 22, 23, 24, 29, 30, 33, 34, 37, 56, 57, 59, 66, 67, 70, 71, 72, 74, 77, 79, 80, 81
Carry out detailed but uninvolved written or oral instructions	•		1, 2, 3, 5, 6, 8, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 32, 33, 34, 35, 37, 38, 60, 79, 80, 81
Carry out one or two step Instructions	•		1, 2, 3, 5, 6, 8, 15, 17, 18, 19, 20, 21, 22, 23, 24, 33, 34, 35, 37, 38, 56, 79, 80, 81
Mathematics Complex skills – Business math, algebra, geometry or statistics	•		17, 18, 20, 21, 24, 38, 54, 55, 56, 57, 67, 70, 76
Simple skills – Add, subtract, multiply and divide whole numbers and fractions, calculate time and simple Measurements	•		3, 5, 8, 17, 18, 20, 21, 24, 33, 34, 35, 37, 38, 54, 55, 67, 70, 76
Reading Complex skills - Comprehend newspapers, manuals, journals, instructions in use and maintenance of equipment, safety rules and procedures and drawings	•		1, 2, 3, 5, 6, 8, 15, 17, 18, 19, 20, 21, 24, 50, 51, 52, 53, 54, 55, 56, 57, 64, 75, 76, 77, 79, 80, 81
Simple skills - Comprehend simple instructions or notations from a log book	•		1, 2, 3, 5, 6, 8, 17, 18, 19, 20, 21, 23, 24, 33, 34, 35, 37, 38, 50, 51, 52, 53, 54, 55, 56, 57, 79, 80, 81
Writing Complex skills – Prepare business letters, report summaries using prescribed form	•		38, 50, 51, 52, 79, 80, 81

at and conforming to all rules of punctuation, spelling, grammar, diction and style			
Simple skills – English sentences containing subject, verb and object; names and- addresses, complete job application or notations in log book	●		3, 5, 6, 8, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 24, 33, 35, 37, 38, 51, 56, 57, 79, 80, 81
Perception Spatial – Ability to comprehend forms in space and understand relationships of plane and solid objects; frequently described as the ability to “visualize” objects of two or three dimensions, or to think visually of geometric forms	●		17, 18, 19, 20, 21, 22, 23, 24, 34, 37, 38, 54, 55, 56, 57, 66, 69, 70, 71, 72, 74, 75, 76, 77, 78, 79, 80, 81
Form – Ability to perceive pertinent detail in objects or in pictorial or graphic material; to make visual comparisons and discriminations and see slight differences in shapes and shadings of figures and widths and lengths of line	●		1, 2, 3, 5, 6, 8, 11, 17, 18, 19, 20, 21, 22, 23, 24, 34, 35, 37, 38, 53, 66, 69, 72, 74, 78, 79, 80, 81
Clerical – Ability to perceive pertinent detail in verbal or tabular material; to observe differences in copy, to proof- read words and numbers, and to avoid perceptual errors in arithmetic computation	●		1, 2, 3, 5, 6, 7, 8, 17, 18, 19, 20, 21, 24, 35, 36, 37, 38, 53, 67, 70, 79, 80, 81
Data Synthesizing	●		1, 2, 3, 5, 6, 7, 8, 16, 17, 20, 24, 25, 26, 35, 38, 53, 58
Coordinating	●		8, 11, 17, 20, 24, 25, 35, 38, 53, 62, 79, 80, 81
Analyzing	●		5, 8, 11, 17, 20, 24, 35, 36, 38, 53, 66, 67, 69, 71, 72, 75, 76, 78, 79, 80, 81
Compiling	●		5, 8, 17, 20, 24, 35, 38, 53, 63
Computing	●		5, 8, 17, 20, 24, 35, 38, 53, 58
Copying	●		5, 8, 17, 20, 24, 35, 38, 53
Comparing	●		5, 8, 17, 20, 24, 35, 38, 53
Personal traits Ability to comprehend and follow instructions	●		1, 2, 3, 5, 6, 8, 17, 18, 19, 20, 21, 22, 23, 24, 33, 34, 35, 36, 37, 38, 50, 51, 52, 53, 54, 55, 56, 57, 79, 80, 81
Ability to perform simple and repetitive tasks	●		1, 2, 3, 5, 6, 8, 17, 18, 19, 20, 21, 22, 23, 24, 34, 35, 37, 38, 56, 57, 79, 80, 81
Ability to maintain a work pace appropriate to a given work load	●		1, 2, 3, 5, 6, 8, 11, 17, 18, 19, 20, 21, 22, 23, 24, 34, 37, 38, 56, 57, 79, 80, 81
Ability to relate to other people beyond giving and receiving instructions	●		1, 2, 3, 4, 5, 6, 7, 8, 11, 14, 17, 18, 19, 20, 21, 22, 23, 33, 34, 35, 36, 37, 38, 56, 57, 79, 80, 81
Ability to influence people	●		13, 17, 18, 19, 20, 21, 22, 23, 33, 34, 35, 38, 56, 57, 79, 80, 81
Ability to perform complex or varied tasks	●		11, 17, 19, 20, 21, 22, 23, 24, 28, 32, 33, 34, 35, 37, 38, 56, 57, 66, 67, 79, 80, 81
Ability to make generalizations, evaluations or decisions without immediate supervision	●		17, 18, 19, 20, 21, 22, 23, 24, 33, 34, 35, 36, 37, 38, 54, 55, 56, 57, 61, 79, 80, 81
Ability to accept and carry out responsibility for direction, control and planning	●		11, 15, 17, 18, 19, 20, 21, 22, 23, 24, 33, 34, 35, 36, 37, 38, 54, 55, 56, 57, 60, 79, 80, 81