

## **Goodwin University – Radiography Program**

### **Physical and Cognitive Performance - Essential Tasks**

Radiographers provide patient services with the use of imaging equipment, as directed by physicians qualified to order radiologic procedures. They are responsible for exercising independent judgement in the technical performance of medical imaging procedures by adapting the variable technical parameters of the procedure to the condition of the patient, and by initiating lifesaving first aid and basic life support procedures as necessary during medical emergencies.

**Job Description:** Professional competence requires that radiographers apply knowledge of anatomy, physiology, positioning, imaging systems and radiographic exposure factors in the performance of their duties. They are required to manipulate mobile and stationary radiographic equipment in the production of diagnostic images, as well as transport patients through various areas of the hospital/clinic/facility. It is essential that this professional have the skills to communicate effectively with patients, families of patients, other health professionals and the public. Additional duties include image receptor processing, radiograph and equipment evaluation, patient education and care, radiation protection and venipuncture. The radiographer displays personal attributes of compassion, competency and concern in meeting the special needs of patients.

#### **A. Cognitive Demands** (some of the required skills will be acquired during the program)

<u>SKILL</u>	<u>Specific Requirements</u>
Reading	Must be able to read English to include medical terminology (examples: x-ray requisitions, equipment controls, imaging reports, drug labels, patient charts, medical textbooks/journals)
Speaking	Must have clear English-speaking skills, speak in an audible tone, and have the ability to adapt to patient level of understanding. (examples: interviewing patients, telephone communication, communicating with other health professionals, and patient education)
Writing	Must possess legible writing skills (example: writing in patient charts, x-ray requisitions, essay requirements and reports)
Problem Solving	Must be able to modify equipment and/or patient position to meet patient and procedure requirements. (example: must be able to react quickly and rationally in emergency/chaotic situations)
Reasoning	Must be able to correctly interpret a variety of instructions furnished in written, oral and diagrammatic form.
Mathematic Skills	Algebra: Must be able to calculate variables and formulas; ratios, proportions, square root and percentages

## B. Physical Demands

Key: frequency based on 8-hour workday  
 Constantly = 67 – 100 % of the time  
 Frequently = 34 – 66% of the time  
 Occasionally = 6 – 33% of the time  
 Rarely = 5% or less of the time

<b>Lift/Carry/ Wear</b>	<b>Task</b>	<b>Frequency</b>	<b>Requirement</b>
	Adult/child/infant (1 lb. – 300 lbs.)	Frequently	Essential
	Image Receptors (10 – 25 lbs.)	Constantly/Frequently	Essential
	Lead Aprons (5 25 lbs.)	Frequently	Essential
	Patient Charts (3- 5 lbs.)	Frequently	Essential
	Positioning Aids (1 – 20 lbs.)	Frequently	Essential

<b>Push/Pull/Reach</b>	<b>Task</b>	<b>Frequency</b>	<b>Requirement</b>
	Mobile/portable x-ray machines (500 – 1000lbs on wheels, with and without motor	Occasionally	Essential
	Stretchers/wheelchairs; empty or with patients	Constantly	Essential
	X-ray tube; overhead movement, pulling, pushing	Constantly	Essential
	Fluoroscopic carriage (horizontal reaching, pushing, pulling	Occasionally/Frequently	Essential

<b>Movement/Activity</b>	<b>Task</b>	<b>Frequency</b>	<b>Requirement</b>
	Standing	Constantly	Essential
	Walking	Constantly	Essential
	Sitting	Occasionally	Non-Essential
	Bending	Frequently	Essential
	Crouching	Frequently	Essential

<b>Fine Motor Skills</b>	<b>Task</b>	<b>Frequency</b>	<b>Requirement</b>
	Hand control (knobs, buttons, levers, switches, keyboard, drawing up medications, venipuncture)	Constantly	Essential
	Foot controls (pedals)	Frequently	Essential

<b>Hearing: With or without correction</b>	<b>Task</b>	<b>Frequency</b>	<b>Requirement</b>
	Acute hearing: can distinguish sounds & voices over background noise for patient monitoring equipment, intercom, exposure signal	Constantly	Essential

<b>Vision: with or without correction</b>	<b>Task</b>	<b>Frequency</b>	<b>Requirement</b>
	Near acuity (under 20 feet)	Constantly	Essential
	Far acuity (over 20 feet)	Frequently	Essential
	Depth perception (needle insertion)	Occasionally	Essential

<b>Physical/ Bodily Exposure</b>	<b>Task</b>	<b>Frequency</b>	<b>Requirement</b>
	Noise	Occasionally	Essential
	Radiation	Constantly	Essential
	Electric Shock	Occasionally	Essential
	Blood, body fluids, infectious diseases	Frequently	Essential

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**This sheet must accompany all applications to the Goodwin University Radiography Program. Should the applicant not understand, need clarification, or feel that he/she may have difficulty complying with these essential tasks, he/she should consult the Radiography Program Clinical Coordinator.**

By signing this form, I, \_\_\_\_\_ (print name), signify that I have reviewed the physical and cognitive performance list of essential tasks for radiographers and can comply with the activities as documented on the form.

This form becomes part of the student materials maintained by the Goodwin University Radiography program clinical coordinator while the student is enrolled in the program.

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date