



- Is the position designated as "key operator" of the equipment checked above?  yes  no  
 Is the position responsible for correction of minor malfunctions in equipment?  yes  no  
 Is the position primarily responsible for ordering and/or refilling supplies?  yes  no

5. Regular Contacts -- on campus and off campus.

Individual or Organization Contacted (include individual's title)	Purpose of Contact	Frequency of Contact

6. Minimum acceptable education required for this position.  
 Some High School       Post High School Training       Other, Please explain.  
 High School/GED       Associate's Degree      \_\_\_\_\_  
 High/Trade School       Bachelor's Degree      \_\_\_\_\_

Specific subject courses or equivalent which considered essential to perform the duties and responsibilities of this position.

Subject/Course Required	Credit Hours/Certificate

7. Related experience required for position.  
 None       One year       Three years  
 Up to one year       Two years       How many years? \_\_\_\_\_

8. Special skills, licenses or certifications required for this position. List below.

**To determine if this is a safety sensitive position please check any appropriate section(s) that apply:**

- Does this position include safety-sensitive transportation functions requiring the employee to:
- \_\_\_ a) hold a commercial driver's license (CDL)
  - \_\_\_ b) drive vehicles of over 26,001 GVWR (Gross vehicle weight restrictions)
  - \_\_\_ c) drive vehicles designed to transport more than 16 passengers, including the driver
  - \_\_\_ d) serve as a crew member on board a commercial or an oceanographic vessel
  - \_\_\_ e) control the movement of motor vehicles requiring a commercial driver's license for operation
  - \_\_\_ f) perform activities associated with motor vehicle maintenance/inspection services





**BIOMECHANICAL JOB ANALYSIS**

JOB TITLE: \_\_\_\_\_

DEPARTMENT: \_\_\_\_\_

DATE OF ANALYSIS: \_\_\_\_\_ NAME OF ANALYST: \_\_\_\_\_

Biomechanics is the study of the physical interaction of the worker with his/her tools, machines, materials and work station in order to maximize worker performance and minimize the risk of musculoskeletal injury.

The purpose of this analysis is to facilitate the matching of the worker to the collection of tasks in a manner which will insure safe completion. If the function is an essential function, as defined by ADA, either a reasonable accommodation must be made or the employee must possess physical capacities equal to the physical demands of the job.

**A. STRENGTH FACTORS**

	LIFTING	CARRYING	PULLING	PUSHING
0 to 10 pounds				
11 to 20 pounds				
21 to 50 pounds				
* 51 to 100 pounds				
* over 100 pounds				

KEY: N = never; W = weekly; D = daily; H = hourly;  
 describe on line below, if more frequent than hourly:

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**B. POSTURE FACTORS**

seated		kneeling	
standing		crouching	
walking		bending at waist	
stooping		turning at waist	

KEY: % of day in one or more of these postures (0 - 100); 1 hour = 12.5%

**C. MOVEMENT FACTORS**

1. Climbing. % of day climbing (1 - 100) the following;  
1 hour = 12.5%

stairs		ramps	
ladders		other	

2. Balancing

Is maintaining body equilibrium to prevent a fall required due to a wet, slippery, unsteady, irregular working, walking surface, narrow walking areas, vibrating or moving walkways a factor in this job?

yes       no

**D. HAND AND ARM CONTROL FACTORS**

Is reaching required?	(extending hands and arms in any direction)	<input type="checkbox"/> yes <input type="checkbox"/> no
Is handling required?	(holding object in whole hand or hands)	<input type="checkbox"/> yes <input type="checkbox"/> no
Is fingering required?	(picking, pushing, holding with fingers)	<input type="checkbox"/> yes <input type="checkbox"/> no
Is touch required?	(perception of object characteristic through touch receptors in fingers)	<input type="checkbox"/> yes <input type="checkbox"/> no

Right Hand \_\_\_\_\_ Left Hand \_\_\_\_\_ Right Arm \_\_\_\_\_ Left Arm \_\_\_\_\_

**E. COMMUNICATION FACTORS**

1. Is speaking required in order to perform primary tasks? Other communications methods may be adapted? <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> always <input type="checkbox"/> sometimes <input type="checkbox"/> never
2. Is hearing audio cues, alarms, words, etc., required in order to perform tasks? Other communications may be adapted? <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> always <input type="checkbox"/> sometimes <input type="checkbox"/> never

**F. VISUAL FACTORS**

Visual acuity	<input type="checkbox"/> normal	<input type="checkbox"/> limited	<input type="checkbox"/> not a factor
Depth of perception	<input type="checkbox"/> normal	<input type="checkbox"/> limited	<input type="checkbox"/> not a factor
Field of vision	<input type="checkbox"/> normal	<input type="checkbox"/> limited	<input type="checkbox"/> not a factor
Accommodation	<input type="checkbox"/> normal	<input type="checkbox"/> limited	<input type="checkbox"/> not a factor
Color vision	<input type="checkbox"/> normal	<input type="checkbox"/> limited	<input type="checkbox"/> not a factor

"Limited" means that this capability is either not significant or may be substituted by other sensory capacity.

G. **ENVIRONMENTAL FACTORS** Temperatures of work station can affect biomechanical performance due to clothing restrictions, wearing personal protective equipment, etc.

Work station temperature conditions:

Indoor  Less than 62° \_\_\_\_\_ 62-80° \_\_\_\_\_ over 80° \_\_\_\_\_  
Outdoor  Less than 62° \_\_\_\_\_ 62-80° \_\_\_\_\_ over 80° \_\_\_\_\_

H. **OVERALL JOB/TASK ASSIGNMENT** This job may be defined as:

Sedentary Work 10 pounds maximum; lifting and carrying objects; walking or standing on occasion, primarily sitting

Light Work 20 pounds maximum lifting; carrying 10-pound objects frequently

Medium Work 50 pounds maximum lifting with frequent lifting and carrying up to 20 pounds; frequent standing or walking

Heavy work 100 pounds maximum; occasional lifting, carrying, pushing or pulling 51-100 pounds; frequent lifting, carrying, pulling or pushing up to 50 pounds; frequent standing or walking

and/or

Repetitive Work The arm \_\_\_\_\_, hand L/R or both \_\_\_\_\_, and/or fingers \_\_\_\_\_ are used repetitively; several repetitions of the same musculoskeletal task per hour for at least 2 hours of each work day.

Personal Protective Equipment

Position requires use of personal protection equipment?  yes  no

\* NOTE: You have indicated that this position requires strength factors capable of handling weights 51 to 100 pounds and/or over 100 pounds. This task ability must apply to present employees, as well as candidates being considered for this position in the future. Please give an example of the tasks requiring handling of the appropriate weight/strength factors.

ex: 51 - 100 pounds lifting, carrying, pulling or pushing

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ex: over 100 pounds lifting, carrying, pulling or pushing

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