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## Introduction to Safety – Unit Eight: Ergonomics

### Lab 1: Ergonomics

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Student Name: \_\_\_\_\_

#### Description of Topic

- The term *ergonomics* refers to designing a work environment that is well suited to the motions or positions of the human body. The positions can be stationary, and the movements transitional from one location to another for the whole body, or by one of its members. If the work environment is poorly designed, the result can be an injury.
- One example of an ergonomics concern is sitting at a desk during an extended period of time while working at a computer. If the chair is not designed properly or if the desktop is not at the correct height, it may result in a poor sitting posture and can result in an MSD injury.
- To prevent ergonomic incidents from occurring, many employers implement a “Job Hazard Analysis” program. In this lab exercise, you will perform an analysis of someone who has a posture at a computer station that is correct, and another person who is sitting improperly.

#### Materials Required

- Clipboard with paper
- Smart phone or camera (optional)

#### Objective

- The student will demonstrate a knowledge of how to perform a job hazard analysis of a person sitting at a computer workstation.

#### Lab Assignment

- You will be required to find and observe individuals sitting at computer workstations, presumably at your place of employment or at the college. There will be two individuals that you will conduct a job hazard analysis on.
- Find one person who is sitting properly with good posture, and another person with poor posture. You may want to take photographs (with their permission).
- Write a report that explains your observations, justifying them, and making suggestions on how to correct the workstation that is not acceptable. If the problem is the fault of the individual not sitting properly, then include this information in your report.
- After completing this assignment, submit your report and photographs to your instructor.





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#### Grading Rubric

Below is an example of a rubric to implement when evaluating the performance of individual students for each of the laboratory exercises.

	Excellent 5 pts	Good 4 pts	Fair 3 pts	Poor 2 pts	Unacceptable 1 pts	Grade Received (N/A)
<b>Ability to Follow Directions</b>	Excellent Followed directions to the letter.	Good Followed directions.	Fair Moderately followed directions.	Poor Did not follow directions.	Unacceptable Did not appear concerned with directions.	Grade Received
<b>Demonstrate Knowledge of Tools</b>	Excellent Student knows and is able to identify and explain necessary tools for completion of the project.	Good Student is able to identify and explain necessary tools for completion of the project with some assistance.	Fair Student is unable to identify or use tools without major prompting.	Poor Student is not able to both identify and use tools.	Unacceptable Student's use of tools posed a danger to self and others.	Grade Received
<b>Level of Needed Assistance</b>	Excellent Student was able to complete the task without assistance.	Good Student was able to complete the task with little assistance.	Fair Student was able to complete the task with moderate assistance.	Poor Student was unable to complete task without major assistance.	Unacceptable Student was unable to complete task with assistance.	Grade Received





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	<b>Excellent 5 pts</b>	<b>Good 4 pts</b>	<b>Fair 3 pts</b>	<b>Poor 2 pts</b>	<b>Unacceptable 1 pts</b>	<b>Grade Received (N/A)</b>
<b>Student Preparedness</b>	Excellent Student had/gathered all materials and was completely ready to go to work.	Good Student had/gathered most materials and went to work.	Fair Student had/gathered most materials, however, they needed excess time to do so.	Poor Student did not have/gather some of the needed materials to perform work.	Unacceptable Student did not have/gather the needed materials and was unable to perform work.	Grade Received
<b>Time Management</b>	Excellent Routinely used time well throughout the project to get the job done on time.	Good Used time fairly well throughout the project.	Fair Procrastinated somewhat but did get the job done on time.	Poor Was unable to adequately meet timeline due to inability.	Unacceptable Did not meet timeline due to procrastination or wasting time.	Grade Received





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