



Introduction to Safety – Unit Four: Fire Safety and Emergency Response

Lab Exercise 2: Fire Evacuation

Student Name: _____

Description of Topic

When a fire breaks out in a building occupied by humans, it is vital get them out as quickly and safely as possible. In preparation for the most efficient and prudent exit to take place, an evacuation plan should be established before the event occurs. This plan includes finding the closest exit doors for different locations throughout the building, finding paths that are unobstructed, and placing fire alarms and fire-fighting equipment at strategic locations. A similar plan should be established in preparation for tornados. However, instead of exiting the building, a location should be found for protection near weight-bearing walls.

Materials/Equipment Required

- Graph paper
- Drafting pencils
- Straight-edge
- CAD software program (optional)

Objective

- The student will identify fire evacuation routes, the locations of alarms and firefighting equipment, and the designated tornado shelter at a manufacturing facility or at the college.

Lab Assignment

- Using either graph paper or CAD software, neatly draw a building (at work or at the college) that shows the fire evacuation routes. Also, show where fire alarms are placed, fire extinguishers, or where any other firefighting equipment is located.
- Make another drawing that shows where the tornado shelter in the building is located.
- Write a brief report that includes:
 - Your opinion on why the evacuation route was designed the way it was.
 - Any improvements or changes you would recommend and why.
 - Why the tornado shelter is located where it is.





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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)
Ability to Follow Directions	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
Demonstrate Knowledge of Tools	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
Level of Needed Assistance	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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	Excellent 5 pts	Good 4 pts	Fair 3 pts	Poor 2 pts	Unacceptable 1 pts	Grade Received (N/A)
Student Preparedness	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
Time Management	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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