



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

Lab Exercise 1: Fire Extinguishers

Student Name: _____

Materials Needed:

- Fire extinguishers
 - CO2 (Type C)
 - Dry chemical (Type B)
 - Type A
 - Type D
 - Multi-purpose (Type A-D)
- Proper PPE (glasses/goggles, gloves)
- 4 posters – each with photos showing fires fueled by different materials
 - <http://www.dreamstime.com/stock-image-wood-burning-fire-image13971061>
 - <http://www.dreamstime.com/stock-photo-riots-athens-image18029050>
 - <http://www.dreamstime.com/royalty-free-stock-photography-burning-cable-fire-image36747417>
 - <http://www.dreamstime.com/photos-images/appliance-fire.html#details9577380>

Description of Topic

- The proper use of portable firefighting equipment is an important element to working in a shop where a fire may occur. Student must learn what type of fires exist and the proper way to extinguish each.

Objective

- At the completion of this unit the student should fully understand the use of portable firefighting equipment (extinguishers) as well as what complications each type of fire presents.

Safety and PPE usage

- The handling or discharge of any extinguishers must be done under the supervision of a trained instructor. Careful consideration must be given to pinch points (toes, fingers) when handling the extinguishers.

Warnings

- Improper lifting may result in a back injury.

Lab A

- After attending lecture or reading material on portable fire extinguishers the student should be able to
 - demonstrate a working knowledge of the 4 types of fires by identifying the photos on the poster board





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- identify which extinguisher is suited for each type of fire shown by the photo on the poster board
- demonstrate how to energize each type of extinguisher and describe the hazards associated with each type.
- describe how to use the PASS method as you simulate this action
- show where the most recent inspection date is listed on the extinguisher, and where its expiration date is shown





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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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