

HEAVY EQUIPMENT

Objective:

This session provides the student with introductory knowledge about the various types of heavy equipment used in construction and the opportunity to experience operation of one such piece of equipment. (8 hours)

- I. Introduction of subject and instructor
- II. Types and uses of heavy equipment
 - A. Frequently used equipment
 - B. Specialized equipment
- III. Heavy equipment maintenance by operator
- IV. Heavy equipment safety
- V. Training and licensing requirements
- VI. Instructor loader – backhoe demonstration
- VII. Loader-backhoe operation by student with instructor guidance
- VIII. Review
 - A. Questions and Answers
 - B. Written Test

Heavy Equipment

A. Course Description:

This course consists of four levels:

Level 1--will cover operator safety and personnel protective gear.

Level 2 --will cover types of Heavy Equipment

Level 3 --will cover safe equipment operation and fueling.

Level 4 --will be the pros and cons of being an equipment operator.

B. Objectives: Upon the completion of this course the Cadet will have an understanding of heavy equipment and it's uses and will able to identify the different types.

C. Levels of Learning:

a. Knowledge: Student will have know the various types and procedures of basic heavy equipment.

b. Skill: Student will have an understanding of how to develop equipment skills in accordance with the Associated Builders Contractors NCCER to become an accomplished Heavy Equipment Operator.

c. Attitude: Student must have a can-do attitude to safely operate equipment. A willingness to follow directions and have a good work ethic is necessary.



Heavy Equipment

<u>Time Schedule</u>	<u>Course Sequence</u>	<u>Reminders</u>
50 Minutes	<ul style="list-style-type: none"> • Introduction • Why are we here? • Overview/Agenda • Objectives 	<ul style="list-style-type: none"> • Hand out name- tags & pencils. • Pass around sign in sheet.
Break - 10 minutes		
60 Minutes	<ul style="list-style-type: none"> • Show video: Intro to Heavy Equipment • Discuss heavy equipment: Uses & capabilities 	
Break - 15 Minutes		
50 Minutes	<ul style="list-style-type: none"> • Take students outside for “hands on” training. 	<ul style="list-style-type: none"> • Ensure students have proper safety gear: boots, glasses, hearing protection, hard hats.
Break - 5 minutes		
20 Minutes	<ul style="list-style-type: none"> • Show video: It Always Happens to the Other Guy”. • Discuss safety • Effects of alcohol & drugs • Do’s & Don’ts • Attitude 	
Break - 10 minutes		
20 Minutes	<ul style="list-style-type: none"> • Pro’s & Con’s • Pay & Benefits 	
20 Minutes	<ul style="list-style-type: none"> • Conclusion • Answer questions • Review • Evaluations 	<ul style="list-style-type: none"> • Distribute my business card



Heavy Equipment Operator Quiz

Name _____ Date _____

Circle the correct answers

1. Which of the following functions is not performed by a bulldozer?
 - a. Spreading
 - b. Ripping
 - c. Grubbing
 - d. Trenching

2. The average weight of one cubic yard of dirt is _____ pounds?
 - a. 270
 - b. 1200
 - c. 2700
 - d. 170

3. What type of accident is the top cause of death on construction jobs?
 - a. Falls
 - b. Chemicals
 - c. Heavy equipment accidents
 - d. Hand tools

4. The digging depth at which trenching becomes a particular concern by OSHA standards is _____ feet?
 - a. 5
 - b. 10
 - c. 6
 - d. 15

5. What is an advantage of being an equipment operator?
 - a. Always the same
 - b. Extreme weather
 - c. Low pay
 - d. Continual change of scenery from one job to another



Heavy Equipment Operator Quiz (Answer sheet)

Name _____ Date _____

Circle the correct answers

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 - d. **Trenching**

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Storm Water Management Quiz

Please answer the following questions based on the information presented in today's course:

1. Name two of the four components of a Storm Water System:

a. _____

b. _____

2. Name three of the six factors which impact the designing of a storm water system:

a. _____

b. _____

c. _____

3. In your own words, explain a storm water drainage basin:

4. Name one of the three factors which impact water quality:

