Module Overview

This module introduces trainees to home weatherization including the purpose and benefits of the program. Trainees will learn how homes gain and lose heat energy and how those losses can be reduced by sealing the building shell and by adding insulation.

Objectives

Upon completion of this module, the trainee will be able to do the following:

1. Explain the purpose, benefits, and origins of the home weatherization program.
2. Explain how home weatherization goals are met by reducing heating and cooling losses and by reducing air infiltration.
3. Describe how sources of heating and cooling losses and air filtration points are located.
4. Describe the methods and materials used to reduce heating and cooling losses and to stop air infiltration.
5. Describe how the different components that make up the building shell can affect a home's energy usage.

Performance Tasks

This is a knowledge-based module; there are no performance tasks.

Materials and Equipment

Markers/chalk
Pencils and scratch paper
Whiteboard/chalkboard
Introduction to Weatherization
   PowerPoint® Presentation Slides
   (ISBN 978-0-13-249342-0)
Multimedia projector and screen
Desktop or laptop computer
Appropriate personal protective equipment
Blower door (optional)
Infrared camera (optional)

Samples of insulating materials
Flexible insulation
Rigid foamboard
Loose-fill insulation
Spray-in-place insulation
Spray foam
Samples of caulks, sealants, and weatherstripping
Compact fluorescent lamps
Light-emitting diode lamps
Module Examinations*

* Single-module AIG purchases include the printed exam. If you have purchased the perfect-bound version of this title, download the exam from the IRC using your access code.

Safety Considerations

Ensure that the trainees are equipped with appropriate personal protective equipment and know how to use it properly. Trainees may be exposed to hazardous materials and may be required to work with certain materials such as insulation and/or sealants that require special protective equipment. Make sure that all trainees are briefed on appropriate safety procedures.
Additional Resources

This module is intended to present thorough resources for task training. The following reference works are suggested for both instructors and motivated trainees interested in further study. These are optional materials for continued education rather than for task training.

*Insulate and Weatherize.* Newtown, CT: Taunton Press.


Teaching Time For This Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2 1/2 hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 17 1/2 hours are suggested to cover *Introduction to Weatherization.* You will need to adjust the time required for hands-on activity and testing based on your class size and resources.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Planned Time</th>
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<tbody>
<tr>
<td><strong>Session I. Introduction; Weatherization Concepts</strong></td>
<td></td>
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<tr>
<td>A. Introduction</td>
<td></td>
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<tr>
<td>B. Weatherization Concepts</td>
<td></td>
</tr>
<tr>
<td>1. Home Health and Safety</td>
<td></td>
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<tr>
<td>2. Equipment Condition</td>
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<tr>
<td>3. Tightness of the Building Shell</td>
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<tr>
<td>4. Home Lighting</td>
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<tr>
<td>5. Heat Loss and Heat Gain</td>
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<tr>
<td>6. Air Infiltration</td>
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<tr>
<td><strong>Sessions II–III. Finding Air Leaks; Inadequate Insulation</strong></td>
<td></td>
</tr>
<tr>
<td>A. Visual Inspection of the Home</td>
<td></td>
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<tr>
<td>B. Finding Air Leaks</td>
<td></td>
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<tr>
<td>1. Finding Air Leaks With a Blower Door</td>
<td></td>
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<tr>
<td>C. Finding Inadequate Insulation</td>
<td></td>
</tr>
<tr>
<td><strong>Session IV. Weatherizing a Home, Part One</strong></td>
<td></td>
</tr>
<tr>
<td>A. Adding Insulation</td>
<td></td>
</tr>
<tr>
<td>1. Types of Insulation</td>
<td></td>
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<tr>
<td>2. Flexible Insulation</td>
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<tr>
<td>3. Rigid Foam Board</td>
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<tr>
<td>4. Loose-Fill Insulation</td>
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<tr>
<td>5. Spray-in-Place Insulation</td>
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<tr>
<td>6. Spray Foam Insulation</td>
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</tbody>
</table>
Session V. Weatherizing a Home, Part Two

A. Sealing Air Leaks
   1. Caulks and Sealants
   2. Weatherstripping

B. Losses Through Windows and Doors
   1. Upgrading Windows and Doors
   2. Replacement Windows
   3. Replacement Doors

C. Energy-Efficient Roofs
D. Sealing and Insulating Air Ducts

Session VI. Reducing the Baseload

A. Appliances
   1. Refrigerators
   2. Other Appliances
   3. Water Heaters

B. Lighting
C. The Energy Auditor as Educator

Session VII. Careers in Weatherization; NCCER Training; Review and Testing

A. Careers
   1. Weatherization Technician
   2. Weatherization Crew Chief
   3. Energy Auditor

B. NCCER Training

C. Advancement Opportunities in Weatherization

D. Module Review

E. Module Examination
   1. Trainees must score 70 percent or higher to receive recognition from NCCER.
   2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.
Module Overview

This module explains the role of safety in the construction crafts. Trainees will learn how to identify and follow safe work practices and procedures as well as how to properly inspect and use safety equipment. Trainees will be able to describe safe work procedures for lifting heavy objects, fighting fires, and working around electrical hazards.

Prerequisites

There are no prerequisites for this module.

Objectives

Upon completion of this module, the trainee will be able to do the following:

1. Explain the idea of a safety culture and its importance in the construction crafts.
2. Identify causes of accidents and the impact of accident costs.
3. Explain the role of OSHA in job-site safety.
4. Explain OSHA's General Duty Clause and 1926 CFR Subpart C.
5. Recognize hazard recognition and risk assessment techniques.
6. Explain fall protection, ladder, stair, and scaffold procedures and requirements.
7. Identify struck-by hazards and demonstrate safe working procedures and requirements.
8. Identify caught-in-between hazards and demonstrate safe working procedures and requirements.
9. Define safe work procedures to use around electrical hazards.
10. Demonstrate the use and care of appropriate personal protective equipment (PPE).
11. Explain the importance of hazard communications (HazCom) and material safety data sheets (MSDSs).
12. Identify other construction hazards on your job site, including hazardous material exposures, environmental elements, welding and cutting hazards, confined spaces, and fires.

Performance Tasks

Under the supervision of the instructor, the trainee should be able to do the following:

1. Inspect PPE to determine if it is safe to use (PPE should include safety goggles, hard hat, gloves, safety harness, and safety shoes).
2. Properly don and remove PPE (safety goggles, hard hat, and personal fall protection).
3. Demonstrate safe lifting procedures.
4. Set up an extension ladder properly.
5. Demonstrate three-point contact on a ladder.

Materials and Equipment List

- Multimedia projector and screen
- Desktop or laptop computer
- Whiteboard/chalkboard
- Markers/chalk
- Pencils and scratch paper
- Copies of your local code
- Variety of personal protective equipment, including:
  - Hard hats
  - Safety glasses, goggles, and face shields
  - Safety harness
  - Gloves
  - Safety shoes
  - Hearing protection
  - Respiratory protection
  - Variety of fire extinguishers
  - Variety of communication tags and signs
  - Materials to create hypothetical fire hazards
  - Variety of safety tags, including:
    - Scaffold tags
    - Lockout/tagout tag
    - Fire extinguisher tag
  - Copies of your company’s fall protection plan
Variety of ladders, including:
- Straight ladder
- Extension ladder
- Stepladder

* Located in the back of the Trainee Guide module
** Available only though the Instructor Resource Center using the access code bound with this book.

**Safety Considerations**

Ensure that the trainees are equipped with appropriate personal protective equipment. Always work in a clean, well-lit, appropriate work area.

**Additional Resources**

This module is intended to present thorough resources for task training. The following reference works are suggested for both instructors and motivated trainees interested in further study. These are optional materials for continued education rather than for task training.

- *Construction Back Safety.* Videocassette. 10 minutes. Coastal Training Technologies Corp. Virginia Beach, VA.
- *Construction Confined Space Entry.* Videocassette. 10 minutes. Coastal Training Technologies Corp. Virginia Beach, VA.
- *Construction Electrical Safety.* Videocassette. 10 minutes. Coastal Training Technologies Corp. Virginia Beach, VA.
- *Construction Fall Protection: Get Arrested!* Videocassette. 11 minutes. Coastal Training Technologies Corp. Virginia Beach, VA.
- *Construction Lockout/Tagout.* Videocassette. 10 minutes. Coastal Training Technologies Corp. Virginia Beach, VA.
- *Construction Stairways and Ladders.* Videocassette. 10 minutes. Coastal Training Technologies Corp. Virginia Beach, VA.
- *Construction Welding Safety.* Videocassette. 10 minutes. Coastal Training Technologies Corp. Virginia Beach, VA.
- HazCom for Construction. Videocassette. 11 minutes. Coastal Training Technologies Corp. Virginia Beach, VA.
Teaching Time for this Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 12½ hours are suggested to cover Basic Safety. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Planned Time</th>
</tr>
</thead>
</table>
| **Session I. Introduction to Safety and Accidents** | A. Importance of Safety  
B. Accidents: Causes and Results  
C. Company Safety Policies and OSHA Regulations  
D. Hazard Recognition, Evaluation, and Control |  
| **Session II. Working from Elevations** | A. Elevated Work and Fall Protection  
B. Ladders and Stairs  
C. Laboratory  
Trainees practice setting up and using ladders. This laboratory corresponds to Performance Tasks 4 and 5.  
D. Scaffolds |  
| **Session III. Job-Site Hazards** | A. Struck-by Hazards  
B. Caught-in-Between Hazards  
C. Electrical Hazards |  
| **Session IV. Safety Precautions and Job-Site Hazards** | A. Personal Protective Equipment  
B. Laboratory  
Trainees practice inspecting and donning PPE. This laboratory corresponds to Performance Tasks 1 and 2.  
C. Hazard Communication Standard  
D. Other Job-Site Hazards  
E. Laboratory  
Trainees practice safe lifting techniques. This laboratory corresponds to Performance Task 3. |  
| **Session V. Review and Testing** | A. Review  
B. Module Examination  
1. Trainees must score 70 percent or higher to receive recognition from the NCCER.  
2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.  
C. Performance Testing  
1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements.  
2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor. |
**Module Overview**

This module introduces mathematical operations commonly used in construction, and explains how the metric system and geometry are used in the trade. Trainees will learn how to add, subtract, multiply, and divide whole numbers, fractions, and decimals, as well as how to convert decimals, fractions, and percentages.

**Prerequisites**

Prior to training with this module, it is recommended that the trainee shall have successfully completed the following: *Core Curriculum: Introductory Craft Skills, Module 00101-09*.

**Objectives**

Upon completion of this module, the trainee will be able to do the following:

1. Add, subtract, multiply, and divide whole numbers, with and without a calculator.
2. Use a standard ruler, a metric ruler, and a measuring tape to measure.
3. Add, subtract, multiply, and divide fractions.
4. Add, subtract, multiply, and divide decimals, with and without a calculator.
5. Convert decimals to percentages and percentages to decimals.
6. Convert fractions to decimals and decimals to fractions.
7. Explain what the metric system is and how it is important in the construction trade.
8. Recognize and use metric units of length, weight, volume, and temperature.
9. Recognize some of the basic shapes used in the construction industry and apply basic geometry to measure them.

**Performance Tasks**

This is a knowledge-based module. There are no performance tasks.

**Materials and Equipment List**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimedia projector and screen</td>
<td></td>
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<tr>
<td>Desktop or laptop computer</td>
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<tr>
<td>Whiteboard/chalkboard</td>
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<tr>
<td>Markers/chalk</td>
<td></td>
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<tr>
<td>Pencils and paper</td>
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<tr>
<td>Copies of your local code</td>
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<tr>
<td>Sample work orders that require mathematical functions</td>
<td></td>
</tr>
<tr>
<td>Calculator</td>
<td></td>
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<tr>
<td>Standard ruler (with 1/16-inch markings)</td>
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<tr>
<td>Metric ruler (with centimeters [cm] and millimeters [mm])</td>
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</tr>
<tr>
<td>Tape measure</td>
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<tr>
<td>Architect’s scale</td>
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<tr>
<td>Metric scale</td>
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<tr>
<td>Engineer’s scale</td>
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<tr>
<td>Set of construction drawings</td>
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<tr>
<td>Protractors</td>
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<tr>
<td>Trade Terms Quiz*</td>
<td></td>
</tr>
<tr>
<td>Module Examinations**</td>
<td></td>
</tr>
</tbody>
</table>

* Located in the back of the Trainee Guide module
** Available only though the Instructor Resource Center using the access code bound with this book.
Additional Resources

This module is intended to present thorough resources for task training. The following reference works are suggested for both instructors and motivated trainees interested in further study. These are optional materials for continued education rather than for task training.


Teaching Time for this Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 10 hours are suggested to cover *Introduction to Construction Math*. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Planned Time</th>
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<tbody>
<tr>
<td><strong>Session I. Whole Numbers and Measurements</strong></td>
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<tr>
<td>A. Whole Numbers</td>
<td></td>
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<tr>
<td>B. Working with Length Measurements</td>
<td></td>
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<tr>
<td>C. Other Types of Scales</td>
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<tr>
<td>D. Laboratory</td>
<td></td>
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<tr>
<td>Have trainees practice taking measurements using scales.</td>
<td></td>
</tr>
<tr>
<td><strong>Session II. Fractions and Decimals</strong></td>
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</tr>
<tr>
<td>A. Reducing and Comparing Fractions</td>
<td></td>
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<tr>
<td>B. Adding and Subtracting Fractions</td>
<td></td>
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<tr>
<td>C. Multiplying and Dividing Fractions</td>
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<tr>
<td>D. Comparing Decimals</td>
<td></td>
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<tr>
<td>E. Adding and Subtracting Decimals</td>
<td></td>
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<tr>
<td>F. Multiplying and Dividing Decimals</td>
<td></td>
</tr>
<tr>
<td><strong>Session III. Conversion and Geometry</strong></td>
<td></td>
</tr>
<tr>
<td>A. Converting Fractions and Decimals</td>
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<tr>
<td>B. Converting Inches and Decimals</td>
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<tr>
<td>C. Introduction to Construction Geometry</td>
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<tr>
<td>D. Area of Shapes</td>
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<tr>
<td>E. Volume of Shapes</td>
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<tr>
<td><strong>Session IV. Review and Testing</strong></td>
<td></td>
</tr>
<tr>
<td>A. Review</td>
<td></td>
</tr>
<tr>
<td>B. Module Examination</td>
<td></td>
</tr>
<tr>
<td>1. Trainees must score 70 percent or higher to receive recognition from the NCCER.</td>
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<tr>
<td>2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.</td>
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</tbody>
</table>
Module Overview

This module explains how to inspect and properly use hand tools. Trainees will learn how to identify and take care of basic hand tools.

Prerequisites

Prior to training with this module, it is recommended that the trainee shall have successfully completed the following: Core Curriculum: Introductory Craft Skills, Modules 00101-09 and 00102-09.

Objectives

Upon completion of this module, the trainee will be able to do the following:
1. Recognize and identify some of the basic hand tools and their proper uses in the construction trade.
2. Visually inspect hand tools to determine if they are safe to use.
3. Safely use hand tools.

Performance Tasks

Under the supervision of the instructor, the trainee should be able to do the following:
1. Visually inspect the following tools to determine if they are safe to use:
   - Hammer
   - Screwdriver
   - Saw
2. Make a straight square cut using a crosscut saw.
3. Safely and properly use a minimum of three of the following tools:
   - Hammer and cat’s paw (to drive and pull nails)
   - Screwdriver (slotted or Phillips)
   - Adjustable wrench
   - CHANNELLOCK® pliers
   - Spirit level
   - Carpenter’s square and steel tape
   - Saw

Materials and Equipment List

- Multimedia projector and screen
- Desktop or laptop computer
- Whiteboard/chalkboard
- Markers/chalk
- Pencils and scratch paper
- Copies of your local code
- Appropriate personal protective equipment
- Claw hammer
- Wood board with nails to practice using hammers
- Ball peen hammer
- Screwdrivers, including:
  - Slotted
  - Phillips
- Wood board with screws to practice using screwdrivers
- Sledgehammer
- Stake
- Ripping bar
- Nail pullers, including:
  - Cat’s paw
  - Chisel bar
  - Flat bar
- Wood boards with nails to practice using nail pullers
- Pliers, including:
  - Slip-joint
  - Long-nose
  - Lineman
  - Tongue-and-groove
  - CHANNELLOCK® pliers
- Boards with wire and soft metals to practice using pliers
Measuring tools, including:
- Steel rule
- Measuring tape
- Wooden folding rule
- Laser measuring tool
- Spirit level

Squares, including:
- Carpenter’s square
- Combination square
- Try square

Square wood frames to practice using the measuring tools
- Plumb bob
- Self-chalker

Clamps, including:
- C-clamp
- Locking C-clamp
- Spring clamp
- Bar clamp
- Pipe clamp
- Hand-screw clamp
- Quick Grip®
- Web clamp

Crosscut saw

Sections of wood suitable for sawing

Files and rasps, including:
- Veneer knife file
- Square file
- Triangle file
- Flat file
- Rat-tail file
- Rasp
- File card
- Materials to be filed
- Wood chisel
- Cold chisel
- Wood and metal to practice using chisels
- Punches
- Wrenches, including:
  - Nonadjustable wrench
  - Adjustable wrench
  - Torque wrench
- Sockets and ratchets
- Utility knife
- Cardboard box to practice cutting with a utility knife
- Shovels
- Pick
- Trade Terms Quiz*
- Module Examinations**
- Performance Profile Sheets**

* Located in the back of the Trainee Guide module
** Available only though the Instructor Resource Center using the access code bound with this book.

## Safety Considerations

Ensure that the trainees are equipped with appropriate personal protective equipment. Always work in a clean, well-lit, appropriate work area.

## Additional Resources

This module is intended to present thorough resources for task training. The following reference works are suggested for both instructors and motivated trainees interested in further study. These are optional materials for continued education rather than for task training.

Teaching Time for this Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 10 hours are suggested to cover *Introduction to Hand Tools*. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Planned Time</th>
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<tbody>
<tr>
<td><strong>Session I. Hand Tools, Part One</strong></td>
<td></td>
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<tr>
<td>A. Hammers</td>
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<tr>
<td>B. Laboratory</td>
<td>Trainees practice inspecting and using a hammer. This laboratory corresponds to Performance Tasks 1 and 3.</td>
</tr>
<tr>
<td>C. Ripping Bars and Nail Pullers</td>
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</tr>
<tr>
<td>D. Laboratory</td>
<td>Trainees practice using nail pullers. This laboratory corresponds to Performance Task 3.</td>
</tr>
<tr>
<td>E. Chisels and Punches</td>
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<tr>
<td>F. Laboratory</td>
<td>Trainees practice using chisels and punches.</td>
</tr>
<tr>
<td>G. Screwdrivers</td>
<td></td>
</tr>
<tr>
<td>H. Laboratory</td>
<td>Trainees practice inspecting and using screwdrivers. This laboratory corresponds to Performance Tasks 1 and 3.</td>
</tr>
<tr>
<td><strong>Session II. Hand Tools, Part Two</strong></td>
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</tr>
<tr>
<td>A. Pliers and Wire Cutters</td>
<td></td>
</tr>
<tr>
<td>B. Laboratory</td>
<td>Trainees practice using CHANNELLOCK® and other pliers. This laboratory corresponds to Performance Task 3.</td>
</tr>
<tr>
<td>C. Wrenches</td>
<td></td>
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<tr>
<td>D. Laboratory</td>
<td>Trainees practice using adjustable wrenches. This laboratory corresponds to Performance Task 3.</td>
</tr>
<tr>
<td>E. Sockets and Ratchets</td>
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<tr>
<td>F. Torque Wrenches</td>
<td></td>
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<tr>
<td>G. Rules and Other Measuring Tools</td>
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</tr>
<tr>
<td>H. Laboratory</td>
<td>Trainees practice using rules and other measuring tools. This laboratory corresponds to Performance Task 3.</td>
</tr>
<tr>
<td>I. Levels</td>
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<tr>
<td>J. Laboratory</td>
<td>Trainees practice using spirit levels. This laboratory corresponds to Performance Task 3.</td>
</tr>
</tbody>
</table>
Session III. Hand Tools, Part Three

A. Squares
B. Laboratory
   Trainees practice using a carpenter’s square. This laboratory corresponds to Performance Task 3.
C. Plumb Bob
D. Chalk Lines
E. Utility Knives
F. Saws
G. Laboratory
   Trainees practice inspecting saws and using a crosscut saw to make cuts. This laboratory corresponds to Performance Tasks 1, 2, and 3.
H. Files and Rasps
I. Laboratory
   Trainees practice using files and file cards.
J. Clamps
K. Performance Testing
   Trainees practice working with various hand tools necessary to complete the requirements for Performance Task 3.

Session IV. Hand Tools, Part Four; Review and Testing

A. Chain Falls and Come-Alongs
B. Shovels
C. Picks
D. Review
E. Module Examination
   1. Trainees must score 70 percent or higher to receive recognition from the NCCER.
   2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.
F. Performance Testing
   1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements.
   2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.
Module Overview

This module introduces power tools commonly used in the construction trade. Trainees will learn how to safely use and properly maintain a variety of power tools.

Prerequisites

Prior to training with this module, it is recommended that the trainee shall have successfully completed the following: Core Curriculum: Introductory Craft Skills, Modules 00101-09 through 00103-09.

Objectives

Upon completion of this module, the trainee will be able to do the following:

1. Identify power tools commonly used in the construction trades.
2. Use power tools safely.
3. Explain how to maintain power tools properly.

Performance Tasks

Under the supervision of the instructor, the trainee should be able to do the following:

1. Safely and properly use three of the following tools:
   • Safely and properly operate an electric drill.
   • Safely and properly operate a circular saw.
   • Safely and properly operate a SawZall®.
   • Safely and properly operate a pneumatic power nailer.

Materials and Equipment List

Multimedia projector and screen
Desktop or laptop computer
Whiteboard/chalkboard
Markers/chalk
Pencils and scratch paper
Copies of your local codes
Appropriate personal protective equipment
Power drills, including:
   Electric drill
   Cordless drill
   Hammer drill
   Electromagnetic drill
   Pneumatic drill (air hammer)
   Electric screwdriver
Variety of drill bits
Saws, including:
   Circular saw (Skillsaw®)
   Saber saw
   Reciprocating saw (SawZall®)
   Portable handheld bandsaw
   Power miter saw

Variety of saw blades
Changeable blades for saber saws
Boards to practice cutting
Handheld grinders, including:
   Angle grinder
   End grinder
   Detail grinder
Miscellaneous power tools, including:
   Pneumatically powered nailer (nail gun)
   Powder-actuated fastening system
   Air impact wrench
   Pavement breaker
   Hydraulic jack
   Porta-Power®
   Nails
   Air compressor
   Nuts and bolts to practice using an air impact wrench

Trade Terms Quiz*
Module Examinations**
Performance Profile Sheets**

* Located in the back of the Trainee Guide module
**Available only though the Instructor Resource Center using the access code bound with this book.
Safety Considerations

Ensure that the trainees are equipped with appropriate personal protective equipment. Always work in a clean, well-lit, appropriate work area.

Additional Resources

This module is intended to present thorough resources for task training. The following reference works are suggested for both instructors and motivated trainees interested in further study. These are optional materials for continued education rather than for task training.

Hand and Power Tool Training. Video. All About OSHA. Surprise, AZ.
Powered Hand Tool Safety: Handle with Care. Video. 20 minutes. Coastal Training Technologies Corp. Virginia Beach, VA.

Teaching Time for this Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 10 hours are suggested to cover Introduction to Power Tools. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

<table>
<thead>
<tr>
<th>Topic</th>
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<tbody>
<tr>
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<tr>
<td>A. Electric, Pneumatic, and Hydraulic Tools</td>
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<tr>
<td>B. Power Drill</td>
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<tr>
<td>C. Laboratory</td>
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<tr>
<td>Trainees practice using power drills. This laboratory corresponds to Performance Task 1.</td>
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<tr>
<td>D. Cordless Drills</td>
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<td>E. Hammer Drills</td>
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<td>F. Electromagnetic Drills</td>
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<td>G. Pneumatic Drills</td>
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<tr>
<td><strong>Session II. Power Tools, Part Two</strong></td>
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<tr>
<td>A. Circular Saws</td>
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<tr>
<td>B. Laboratory</td>
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<tr>
<td>Trainees practice using circular saws. This laboratory corresponds to Performance Task 2.</td>
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<tr>
<td>C. Saber Saws</td>
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<tr>
<td>D. Reciprocating Saws (SawZalls®)</td>
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<tr>
<td>E. Laboratory</td>
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<tr>
<td>Trainees practice using SawZalls®. This laboratory corresponds to Performance Task 3.</td>
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<tr>
<td>F. Portable Handheld Bandsaw</td>
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<td>G. Power Miter Saw</td>
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<tr>
<td>H. Abrasive Cutoff Saw</td>
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</tbody>
</table>
Session III. Power Tools, Part Three

A. Grinders and Sanders
   Trainees practice using handheld grinders.

B. Laboratory
   Trainees practice using a pneumatic power nailer. This laboratory corresponds to Performance Task 4.

C. Pneumatically Powered Nailers

D. Laboratory
   Trainees practice using a pneumatic power nailer. This laboratory corresponds to Performance Task 4.

E. Powder-Actuated Fastening Systems

F. Air Impact Wrench

G. Laboratory
   Trainees practice using an air impact wrench.

H. Pavement Breaker

I. Hydraulic Jack

J. Laboratory
   Trainees practice using hydraulic jacks and Porta-Powers®.

Session IV. Review and Testing

A. Review

B. Module Examination
   1. Trainees must score 70 percent or higher to receive recognition from the NCCER.
   2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.

C. Performance Testing
   1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements.
   2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.
Module Overview

This module discusses construction drawing terms, components, and symbols. Trainees will learn how to interpret construction drawings, recognize classifications of drawings, and use drawing dimensions.

Prerequisites

Prior to training with this module, it is recommended that the trainee shall have successfully completed the following: Core Curriculum: Introductory Craft Skills, Modules 00101-09 through 00104-09. Module 00106-09 is an elective and is not a requirement for completion of this course.

Objectives

Upon completion of this module, the trainee will be able to do the following:

1. Recognize and identify basic construction drawing terms, components, and symbols.
2. Relate information on construction drawings to actual locations on the print.
3. Recognize different classifications of construction drawings.
4. Interpret and use drawing dimensions.

Performance Tasks

Under the supervision of the instructor, the trainee should be able to do the following:

1. Using the floor plan supplied with this module:
   - Locate the wall common to both interview rooms.
   - Determine the overall width of the structure studio.
   - Find the distance from the outside east wall to the center of the beam in the structure studio.
   - Find the elevation of the slab.

Materials and Equipment List

- Multimedia projector and screen
- Core Curriculum PowerPoint® Presentation Slides
- Desktop or laptop computer
- Whiteboard/chalkboard
- Markers/chalk
- Pencils and scratch paper
- Copies of your local code
- Door, window, and hardware schedules
- A complete set of plans, including:
  - Civil
  - Architectural
  - Fire Protection
  - Structural
  - Mechanical
  - Plumbing
  - Electrical
  - Specifications
  - Construction drawings with title block
  - Construction drawings with a legend
  - Construction drawings with a gridline system
  - Construction drawings with interior and exterior measurements
  - Trade Terms Quiz*
  - Module Examinations**
  - Performance Profile Sheets**

* Located in the back of the Trainee Guide module
**Available only though the Instructor Resource Center using the access code bound with this book.
Additional Resources

This module is intended to present thorough resources for task training. The following reference works are suggested for both instructors and motivated trainees interested in further study. These are optional materials for continued education rather than for task training.


Teaching Time for this Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 10 hours are suggested to cover *Introduction to Construction Drawings*. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

<table>
<thead>
<tr>
<th>Topic</th>
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<tr>
<td><strong>Session I. The Drawing Set and Types of Construction Drawings, Part One</strong></td>
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<tr>
<td>A. Basic Components of Construction Drawings</td>
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<td>B. Civil Plans</td>
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<td>C. Architectural Plans</td>
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<tr>
<td>D. Laboratory</td>
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<tr>
<td>Trainees practice using a floor plan. This laboratory corresponds to Performance Tasks 1 and 4.</td>
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</tr>
<tr>
<td><strong>Session II. Types of Construction Drawings, Part Two</strong></td>
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<td>A. Structural Plans</td>
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<td>B. Mechanical Plans</td>
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<td>C. Plumbing/Piping Plans</td>
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<td>D. Electrical Plans</td>
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<td>E. Fire Protection Plans</td>
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<td>F. Specifications</td>
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<td>G. Request for Information</td>
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<td><strong>Session III. Construction Drawings</strong></td>
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<td>A. Scale</td>
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<td>B. Lines of Construction</td>
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<tr>
<td>C. Abbreviations, Symbols, and Keynotes</td>
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<tr>
<td>D. Using Gridlines to Identify Plan Locations</td>
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<tr>
<td>E. Dimensions</td>
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<tr>
<td>F. Laboratory</td>
<td></td>
</tr>
<tr>
<td>Trainees practice using a floor plan. This laboratory corresponds to Performance Tasks 2 and 3.</td>
<td></td>
</tr>
</tbody>
</table>
Session IV. Review and Testing

A. Review

B. Module Examination
   1. Trainees must score 70 percent or higher to receive recognition from the NCCER.
   2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.

C. Performance Testing
   1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements.
   2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.
Module Overview

This module introduces the uses of slings and common rigging hardware. Trainees will learn basic inspection techniques, hitch configurations, and load-handling safety practices, as well as how to use American National Standards Institute hand signals.

Prerequisites

Prior to training with this module, it is recommended that the trainee shall have successfully completed the following: Core Curriculum: Introductory Craft Skills, Modules 00101-09 through 00105-09. This module is an elective and is not a requirement for completion of this course. Trainees can obtain further training and a rigging completion certificate from the Contren® Learning Series Rigging curriculum.

Objectives

Upon completion of this module, the trainee will be able to do the following:
1. Identify and describe the use of slings and common rigging hardware.
2. Describe basic inspection techniques and rejection criteria used for slings and hardware.
3. Describe basic hitch configurations and their proper connections.
4. Describe basic load-handling safety practices.

Performance Tasks

Under the supervision of the instructor, the trainee should be able to do the following:
1. Select and inspect appropriate slings for a lift.
2. Given various loads, determine the proper hitch to be used.
3. Select and inspect appropriate hardware and/or lifting equipment.
4. Demonstrate and/or simulate the proper techniques for connecting hitches.
5. Demonstrate the proper use of all hand signals according to ANSI B30.2 and B30.5.
6. Describe or demonstrate pre-lift safety checks.
7. Demonstrate and/or simulate how to lift the load level.
8. Describe and/or demonstrate safety precautions for attaching and disconnecting a load.

Materials and Equipment List

- Multimedia projector and screen
- Desktop or laptop computer
- Whiteboard/chalkboard
- Markers/chalk
- Pencils and scratch paper
- Copies of your local code
- Appropriate personal protective equipment
- Identification tags for slings
- Copies of Figure 16 with labels covered
- Damaged slings or photos of damaged slings
- Anchor shackles and chain shackles
- Various types of pins, including:
  - Screw pin shackle
  - Round pin or straight pin shackle
  - Safety shackle
- Damaged shackles and pins
- Damaged and undamaged eyebolts
- Undamaged lifting clamps
- Rusty or corroded lifting clamps
- Damaged and undamaged rigging hooks
- Trade Terms Quiz*
- Module Examinations**
- Performance Profile Sheets**

* Located in the back of the Trainee Guide module
**Available only though the Instructor Resource Center using the access code bound with this book.
Safety Considerations

Ensure that the trainees are equipped with appropriate personal protective equipment. Always work in a clean, well-lit, and appropriate work area.

Note

Due to liability issues, trainees under the age of 18 should not perform hoisting maneuvers; therefore, trainees under 18 should not perform the demonstration aspect of Performance Task numbers 4, 7, and 8. The instructor may choose to have trainees simulate the concepts underlying the tasks by using alternative methods.

If you do not have access to rigging hardware or equipment, there are many resources available to you including local contractors, rigging equipment manufacturers, or even your local Training Program.

Additional Resources

This module is intended to present thorough resources for task training. The following reference works are suggested for both instructors and motivated trainees interested in further study. These are optional materials for continued education rather than for task training.


Teaching Time for this Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2 1/2 hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 15 hours are suggested to cover Basic Rigging. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

<table>
<thead>
<tr>
<th>Topic</th>
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<tr>
<td>A. Introduction</td>
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<td>B. Tagging Requirements</td>
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<td>C. Synthetic Slings</td>
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<td>D. Alloy Steel Chain Slings</td>
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<tr>
<td>E. Wire Rope Slings</td>
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<tr>
<td>F. Laboratory</td>
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<tr>
<td></td>
<td>Have trainees practice selecting and inspecting slings for a lift. This laboratory corresponds to Performance Task 1.</td>
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<tr>
<td>Session II. Hitches</td>
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<tr>
<td>A. Vertical Hitch</td>
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<td>B. Choker Hitch</td>
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<td>C. Basket Hitch</td>
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<tr>
<td>D. Laboratory</td>
<td></td>
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<tr>
<td></td>
<td>Have trainees practice selecting appropriate hitches for loads. This laboratory corresponds to Performance Task 2.</td>
</tr>
</tbody>
</table>
Session III. Rigging Hardware
A. Shackles
B. Eyebolts
C. Lifting Clamps
D. Rigging Hooks
E. Laboratory
   Have trainees practice selecting and inspecting appropriate hardware and/or lifting equipment. This laboratory corresponds to Performance Task 3.

Session IV. Sling Stress and Hoists
A. Sling Stress
B. Operation of Chain Hoists
C. Hoist Safety and Maintenance

Session V. Rigging Operations and Practices
A. Rated Capacity
B. Sling Attachment
C. Hardware Attachment
D. Load Control
E. Laboratory
   Have trainees practice demonstrating proper use of all hand signals and completing pre-lift safety checks. These laboratories correspond to Performance Tasks 5 and 6.

Session VI. Review and Testing
A. Review
B. Module Examination
   1. Trainees must score 70 percent or higher to receive recognition from the NCCER.
   2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.
C. Performance Testing
   1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements.
   2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.
Module Overview

This module reviews basic communication skills. Trainees will learn how to interpret information in written and verbal form and how to communicate effectively using written and verbal skills, as well as using electronic communication devices.

Prerequisites

Prior to training with this module, it is recommended that the trainee shall have successfully completed the following: Core Curriculum: Introductory Craft Skills, Modules 00101-09 through 00105-09. Module 00106-09 is an elective and is not a requirement for completion of this course.

Objectives

Upon completion of this module, the trainee will be able to do the following:

1. Interpret information and instructions presented in both verbal and written form.
2. Communicate effectively in on-the-job situations using verbal and written skills.

Performance Tasks

Under the supervision of the instructor, the trainee should be able to do the following:

1. Fill out a work-related form supplied by your instructor.
2. Read instructions for how to properly don a safety harness, and orally instruct another person to don the apparatus.
3. Perform a given task after listening to oral instructions.

Materials and Equipment List

| Multimedia projector and screen | Work orders and schedules |
| Desktop or laptop computer | Change orders |
| Whiteboard/markers | Company memos and newsletters |
| Copies of your local code | Trade manuals |
| Fall protection harness | Work-related forms, including: |
| Instructions for donning a safety harness | Accident reports |
| Examples of written materials commonly used on the job, including: | Time and materials reports |
| Safety procedures | Training reports |
| Construction drawings | Time sheets |
| Manufacturer’s manuals | RFIs |
| Materials lists | Copies of the Teaching Tips handouts* |
| Punch lists | Module Examinations** |
| | Performance Profile Sheets** |

* Located in the back of the Trainee Guide module

** Available only through the Instructor Resource Center using the access code bound with this book.
Additional Resources

This module is intended to present thorough resources for task training. The following reference works are suggested for both instructors and motivated trainees interested in further study. These are optional materials for continued education rather than for task training.


Teaching Time for this Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 7½ hours are suggested to cover Basic Communication Skills. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

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<tr>
<td>A. The Communication Process</td>
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<tr>
<td>B. Active Listening on the Job</td>
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<tr>
<td>C. Laboratory</td>
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<tr>
<td>Trainees practice following verbal instructions, including those for donning a safety harness. This laboratory corresponds to Performance Tasks 2 and 3.</td>
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<tr>
<td>D. Speaking on the Job</td>
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<tr>
<td><strong>Session II. Reading and Writing Skills</strong></td>
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<td>A. Reading on the Job</td>
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<tr>
<td>B. Writing on the Job</td>
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<td>C. Laboratory</td>
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<tr>
<td>Trainees practice accurately completing work-related forms. This laboratory corresponds to Performance Task 1.</td>
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<tr>
<td><strong>Session III. Review and Testing</strong></td>
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<tr>
<td>A. Review</td>
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<tr>
<td>B. Module Examination</td>
<td></td>
</tr>
<tr>
<td>1. Trainees must score 70 percent or higher to receive recognition from the NCCER.</td>
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<tr>
<td>2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.</td>
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<tr>
<td>C. Performance Testing</td>
<td></td>
</tr>
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<td>1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements.</td>
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</table>
Module Overview
This module discusses basic employability skills. Trainees will learn how to effectively use critical thinking, computer, and relationship skills in the construction industry. This module will also include trainee awareness of such workplace issues as sexual harassment, stress, and substance abuse.

Prerequisites
Prior to training with this module, it is recommended that the trainee shall have successfully completed the following: Core Curriculum: Introductory Craft Skills, Modules 00101-09 through 00107-09. Module 00106-09 is an elective and is not a requirement for completion of this course.

Objectives
Upon completion of this module, the trainee will be able to do the following:
1. Explain your role as an employee in the construction industry.
2. Demonstrate critical thinking skills and the ability to solve problems using those skills.
3. Demonstrate knowledge of computer systems and explain common uses for computers in the construction industry.
4. Define effective relationship skills.
5. Recognize workplace issues such as sexual harassment, stress, and substance abuse.

Performance Tasks
Under the supervision of the instructor, the trainee should be able to do the following:
1. Demonstrate the ability to access, retrieve, and print from the following basic software programs:
   - Email
   - Databases
   - Internet

Materials and Equipment List
Multimedia projector and screen
Desktop or laptop computer
Whiteboard/chalkboard
Markers/chalk
Pencils and scratch paper
Copies of your local code
Various mission statements
Variety of job listings
Excerpts from federal laws prohibiting job discrimination

News articles highlighting workplace incidents, including:
- Harassment
- Stress
- Drug and alcohol abuse
Copies of the Handouts for the Teaching Tips
Trade Terms Quiz*
Module Examinations**
Performance Profile Sheets**

* Located in the back of the Trainee Guide module
** Available only though the Instructor Resource Center using the access code bound with this book.
Additional Resources

This module is intended to present thorough resources for task training. The following reference works are suggested for both instructors and motivated trainees interested in further study. These are optional materials for continued education rather than for task training.


Teaching Time for this Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 7½ hours are suggested to cover Basic Employability Skills. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

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<tbody>
<tr>
<td><strong>Session I. Employability Skills, Part One</strong></td>
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<tr>
<td>A. The Construction Business</td>
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<tr>
<td>B. Critical Thinking Skills</td>
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<td>C. Laboratory</td>
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<tr>
<td>Trainees practice solving problems. This laboratory corresponds to Performance Task 2.</td>
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<tr>
<td><strong>Session II. Employability Skills, Part Two</strong></td>
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<tr>
<td>A. Computer Skills</td>
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<tr>
<td>B. Laboratory</td>
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<tr>
<td>Trainees practice computer skills. This laboratory corresponds to Performance Task 1.</td>
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<tr>
<td>C. Relationship Skills</td>
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<tr>
<td>D. Workplace Issues</td>
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<tr>
<td><strong>Session III. Review and Testing</strong></td>
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<tr>
<td>A. Review</td>
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<tr>
<td>B. Module Examination</td>
<td></td>
</tr>
<tr>
<td>1. Trainees must score 70 percent or higher to receive recognition from the NCCER.</td>
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<tr>
<td>2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.</td>
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<tr>
<td>C. Performance Testing</td>
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<tr>
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</table>
Module Overview

This module will introduce the concept of materials handling. Trainees will learn how to properly handle materials and move them around the job site, as well as how to choose the appropriate materials-handling equipment, recognize hazards, and follow materials-handling safety procedures.

Prerequisites

Prior to training with this module, it is recommended that the trainee shall have successfully completed the following: Core Curriculum: Introductory Craft Skills, Modules 00101-09 through 00108-09. Module 00106-09 is an elective and is not a requirement for completion of this course.

Objectives

Upon completion of this module, the trainee will be able to do the following:

1. Define a load.
2. Establish a pre-task plan prior to moving a load.
3. Use proper materials-handling techniques.
4. Choose appropriate materials-handling equipment for the task.
5. Recognize hazards and follow safety procedures required for materials handling.

Performance Tasks

Under the supervision of the instructor, the trainee should be able to do the following:

1. Demonstrate proper materials-handling techniques.

Materials and Equipment List

- Multimedia projector and screen
- Desktop or laptop computer
- Copies of your local code
- Appropriate personal protective equipment
- Materials to be moved, including:
  - Pipes
  - Pallets
  - Stacks of boxes
  - Sheets of plywood
  - Various objects to be lifted
- Material cart
- Hand truck
- Roller skids
- Wheelbarrow
- Pipe mule
- Jack
- Pallet jack
- Powered wheelbarrow
- Concrete mule
- Pipe mule
- Concrete mule
- Trade Terms Quiz*
- Module Examinations**
- Performance Profile Sheets**

* Located in the back of the Trainee Guide module
** Available only through the Instructor Resource Center using the access code bound with this book.

Safety Considerations

Ensure that the trainees are equipped with appropriate personal protective equipment. Always work in a clean, well-lit, appropriate work area.
**Additional Resources**

This module is intended to present thorough resources for task training. The following reference work is suggested for both instructors and motivated trainees interested in further study. This is optional material for continued education rather than for task training.


**Teaching Time for this Module**

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 5 hours are suggested to cover *Introduction to Materials Handling*. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Planned Time</th>
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<tbody>
<tr>
<td><strong>Session I. Materials-Handling Basics, Safety, and Equipment</strong></td>
<td></td>
</tr>
<tr>
<td>A. Materials-Handling Basics</td>
<td></td>
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<tr>
<td>B. Laboratory</td>
<td>Trainees practice proper lifting procedures. This laboratory corresponds to Performance Task 1.</td>
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<tr>
<td>C. Materials-Handling Safety</td>
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<tr>
<td>D. Non-Motorized and Motorized Equipment</td>
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<tr>
<td>E. Laboratory</td>
<td>Trainees practice using non-motorized and motorized materials-handling equipment. This laboratory corresponds to Performance Task 1.</td>
</tr>
<tr>
<td><strong>Session II. Hand Signals; Review and Testing</strong></td>
<td></td>
</tr>
<tr>
<td>A. Hand Signals</td>
<td></td>
</tr>
<tr>
<td>B. Review</td>
<td></td>
</tr>
</tbody>
</table>
| C. Module Examination | 1. Trainees must score 70 percent or higher to receive recognition from the NCCER.  
2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor. |
| D. Performance Testing | 1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements.  
2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor. |