WELDING

STUDENT GRADE RECORD
Career & Technical Education
WINDHAM SCHOOL DISTRICT

Course Outline Modules | Industry Module Test | Industry Module Performance | Module Competency Rating
---|---|---|---
***CORE***
0. CTE Orientation
1. Basic Safety- 00101-09
2. Introduction to Construction Math- 00102-09
3. Introduction to Hand Tools- 00103-09
4. Introduction to Power Tools- 00104-09
5. Introduction to Construction Drawings- 00105-09
6. Basic Rigging- 00106-09
7. Basic Communication Skills- 00107-09
8. Basic Employability Skills- 00108-09
9. Introduction to Materials Handling- 00109-09

***WELDING LEVEL-I***
10. Welding Safety- 29101-09
11. Oxyfuel Cutting- 29102-09
12. Plasma Arc Cutting- 29103-09
13. Air Carbon Arc Cutting and Gouging- 29104-09
14. Base Metal Preparation - 29105-09
15. Weld Quality- 29106-09
16. SMAW – Equipment and Setup- 29107-09
17. Shielded Metal Arc Welding Electrodes- 29108-09
18. SMAW-Beads and Fillet Welds- 29109-09
19. Joint Fit-Up and Alignment- 29110-09
20. SMAW–Groove Welds with Backing- 29111-09
21. SMAW-Open V-Groove Welds- 29112-09

Windham Module Test Average \(x .75\) a Completer
Windham End of Course Exam \(x .25\) b

\[\text{Windham Module Score } (a + b =) \quad 70+\]
\[\% \text{ Competencies Completed } \quad 70+\]
\[\text{Module Competency Rating } \quad 2.7+\]

I hereby authorize the NCCER Registry Department to verify information in my craft training records to Sponsor Representatives upon request. I release and hold harmless the National Center for Construction Education and Research for this verification process.

Signature ________________________________
Date ________________________________

I attest that all of the information reported on this form is true.

________________________________________
Certified Craft Instructor Signature

Date of Report – CORE ________________________________
Date of Report – CSSO ________________________________
Date of Report – Level I ________________________________

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Sponsor Representative

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RECORDING DIRECTIONS
SKILL RATING: Post the student’s competency rating for each skill performed.
MODULE TEST SCORE: Enter the student’s test score for the module.
MODULE RATING: Use the following scale to determine module rating:
Note: When evaluating a student’s module rating, skill performance should be given priority.

CORE

0. CTE Orientation
Teacher Student
Initial Initial
|   |   |
1. Identify employment opportunities related to the course.
2. Identify the number of classroom hours a student must attend to be considered as a completer.
3. Identify the industry-recognized certification.
4. Identify course expectations including:
   • Working conditions
   • Attendance expectations
   • Instructor’s expectations

1. Basic Safety- 00101-09
Module Test Score _______
Minimum 100% Required
Module Rating (4, 3, 2)
Module Rating (4, 3, 2)
1. Inspect personal protective equipment (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 fall protection).
3. Demonstrate safe lifting procedures.
4. Set up an extension ladder properly.
5. Demonstrate three-point contact on a ladder.

2. Introduction to Construction Math- 00102-09
Module Test Score _______
This is knowledge-based; there is no performance test.

3. Introduction to Hand Tools- 00103-09
Module Test Score _______
Module Rating (4, 3, 2)
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 and Phillips)
   • Adjustable wrench
   • CHANNELLOCK® pliers
   • Spirit level
   • Carpenter’s square and steel tape
   • Saw

4. Introduction to Power Tools- 00104-09
Module Test Score _______
Module Rating (4, 3, 2)
1. Safely and properly use three of the following tools:
   • Electric drill
   • Circular saw
   • Saw Zall®
   • Pneumatic power nailer

5. Introduction to Construction Drawings- 00105-09
Module Test Score _______
Module Rating (4, 3, 2)
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.
6. Basic Rigging- 00106-09

Module Test Score ______  
______ Module Rating (4, 3, 2)  
____ 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.

7. Basic Communication Skills- 00107-09

Module Test Score ______  
______ Module Rating (4, 3, 2)  
____ 1. Fill out daily a work-related form supplied by your instructor. (Handouts 4 and 5 are sample forms and are provided in the AIG for this module as an optional resource.)  
____ 2. Read instructions for how to properly don a safety harness, orally instruct another person to don the apparatus.  
____ 3. Perform given task after listening to oral instructions.

8. Basic Employability Skills- 00108-09

Module Test Score ______  
______ Module Rating (4, 3, 2)  
____ 1. Demonstrate the ability to access, retrieve, and print from the following basic software programs:  
  • Email  
  • Databases  
  • Internet

9. Introduction to Materials Handling- 00109-09

Module Test Score ______  
______ Module Rating (4, 3, 2)  
____ 1. Demonstrate proper materials-handling techniques.

10. Welding Safety- 29101-09

Module Test Score ______  
This is knowledge-based; there is no performance test.

11. Oxyfuel Cutting- 29102-09

Module Test Score ______  
______ Module Rating (4, 3, 2)  
____ 1. Set up oxyfuel equipment.  
____ 2. Light and adjust an oxyfuel torch.  
____ 3. Shut down oxyfuel cutting equipment.  
____ 4. Disassemble oxyfuel equipment.  
____ 5. Change empty cylinders.  
____ 6. Cut shapes from various thickness of steel, emphasizing:  
  • Straight line  
  • Square shape  
  • Piercing  
  • Bevel  
  • Slot  
____ 7. Perform washing.  
____ 8. Perform gouging.

12. Plasma Arc Cutting- 29103-09

Module Test Score ______  
______ Module Rating (4, 3, 2)  
____ 1. Setup plasma arc cutting equipment.  
____ 2. Set the amperage and gas pressures or flow rates for the type and thickness of metal to be cut.  
____ 3. Square-cut metal using plasma arc cutting equipment.  
____ 5. Pierce and cut slots in metal using plasma arc cutting equipment.  
____ 6. Dismantle and store the equipment.

13. Air Carbon Arc Cutting and Gouging- 29104-09

Module Test Score ______  
______ Module Rating (4, 3, 2)  
____ 1. Select and install CAC-A electrodes.  
____ 2. Prepare the work area and CAC-A equipment for safe operation.  
____ 3. Use CAC-A equipment for washing.  
____ 4. Use CAC-A equipment for gouging.  
____ 5. Perform storage and housekeeping activities for CAC-A equipment.
14. **Base Metal Preparation- 29105-09**

   **Module Test Score ________**  
   **Module Rating (4, 3, 2)**  
   ____ 1. Mechanically bevel the edge of a mild steel plate 1/4" to 3/8" thick at 22°/2 degrees (or 30 degrees, depending on the equipment available).  
   ____ 2. Thermally prepare a bevel.

15. **Weld Quality- 29106-09**

   **Module Test Score ________**  
   This is knowledge-based; there is no performance test.

16. **SMAW – Equipment and Setup- 29107-09**

   **Module Test Score ________**  
   **Module Rating (4, 3, 2)**  
   ____ 1. Set up SMAW machine for welding.

17. **Shielded Metal Arc Welding-Electrodes- 29108-09**

   **Module Test Score ________**  
   This is knowledge-based; there is no performance test.

18. **SMAW-Beads and Fillet Welds- 29109-09**

   **Module Test Score ________**  
   **Module Rating (4, 3, 2)**  
   ____ 1. Setup welding equipment.  
   ____ 2. Strike an arc.  
   ____ 3. Make stringer, weave, and overlapping beads using E6010 and E7018 electrodes.  
   ____ 4. Make fillet welds using E6010 and E7018 electrodes in the horizontal (2F) position.  
   ____ 5. Make fillet welds using E6010 and E7018 electrodes in the vertical (3F) position.  
   ____ 6. Make fillet welds using E6010 and E7018 electrodes in the overhead (4F) position.

19. **Joint Fit-Up and Alignment- 29110-09**

   **Module Test Score ________**  
   **Module Rating (4, 3, 2)**  
   ____ 1. Fit-up joints using plates and pipe fit-up tools.  
   ____ 2. Check the joint for proper fit-up and alignment using gauges and measuring devices.

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20. **SMAW – Groove Welds with Backing- 29111-09**

   **Module Test Score ________**  
   **Module Rating (4, 3, 2)**  
   ____ 1. Set up arc welding equipment for making groove welds.  
   ____ 2. Make flat welds with backing on V-groove joints using E7018 electrodes.  
   ____ 3. Make horizontal welds with backing on V-groove joints using E7018 electrodes.  
   ____ 4. Make vertical welds with backing on V-groove joints using E7018 electrodes.  
   ____ 5. Make overhead welds with backing on V-groove joints using E7018 electrodes.

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21. **SMAW – Open V-Groove Welds- 29112-09**

   **Module Test Score ________**  
   **Module Rating (4, 3, 2)**  
   ____ 1. Prepare arc welding equipment for open V-groove welds.  
   ____ 2. Make open V-groove welds with E6010 and E7018 electrodes in the (1G) position.  
   ____ 3. Make open V-groove welds with E6010 and E7018 electrodes in the horizontal (2G) position.  
   ____ 4. Make open V-groove welds with E6010 and E7018 electrodes in the vertical (3G) position.  
   ____ 5. Make open V-groove welds with E6010 and E7018 electrodes in the overhead (4G) position.

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**Number of Skills Completed +**

63 **Number of Skills on SPR =**

**% of Skills Completed**

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**Conference**  
Date: ___________ Hours in class: ______  
Comments: ____________________________________________________________  
__________________________________________________________  
__________________________________________________________  
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__________________________________________________________

**Teacher initial: _______ Student initial: _______**