## Piping Trades

### Student Grade Record

**Career & Technical Education**

**Windham School District**

### Student Name ______________________

### TDCJ # ______________________

### Social Security Number ______________________

### Certified Craft Instructor ______________________

### Certified Craft Instructor Code ______________________

### Unit ______________________

### WSD Certificate  Y / N

If I were hiring for this position, I would: (check one)

[ ] 0-No recommendation at this time.

[ ] 1-Hire this person and look no further.

[ ] 2-Interview this person along with other applicants.

[ ] 3-Not hire this person.

### Complete only if student attempted industry certification.

<table>
<thead>
<tr>
<th>Name of Industry Certificate</th>
<th>Code</th>
<th>P/F</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCCER, Core</td>
<td>0300</td>
<td></td>
</tr>
<tr>
<td>NCCER, Plumbing, Level-I</td>
<td>0351</td>
<td></td>
</tr>
<tr>
<td>NCCER, Pipefitting, Level-I</td>
<td>0353</td>
<td></td>
</tr>
<tr>
<td>CSSO</td>
<td>0102</td>
<td></td>
</tr>
<tr>
<td>OSHA</td>
<td>0100</td>
<td></td>
</tr>
</tbody>
</table>

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 – Pipefitting Level I** ______________________

**Date of Report – Plumbing Level I** ______________________

### Sponsor Representative

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### Windham Module Test Average

<table>
<thead>
<tr>
<th>Module Test</th>
<th>Weight</th>
<th>Value</th>
<th>Completer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windham Module Test</td>
<td>0.75</td>
<td>a</td>
<td>Completer</td>
</tr>
<tr>
<td>Windham End of Course Exam</td>
<td>0.25</td>
<td>b</td>
<td>Completer</td>
</tr>
</tbody>
</table>

\[ \text{Windham Module Score } (a + b =) \]

\[ \text{70+} \]

\[ \% \text{Competencies Completed} \]

\[ \text{70+} \]

\[ \text{Module Competency Rating} \]

\[ \text{2.7+} \]

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** ______________________

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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.

- [2] Limited Skill - Requires instruction and close supervision to perform competencies.

**Note:** When evaluating a student’s module rating, skill performance should be given priority.

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### 0. CTE Orientation

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>Initial</td>
</tr>
</tbody>
</table>

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

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### 1. Basic Safety - 00101-09

**Module Test Score** ______

**Minimum 100% Required**

**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.

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### 2. Introduction to Construction Math - 00102-09

**Module Test Score** ______

This is knowledge-based; there is no performance test.

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### 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

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### 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

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### 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.

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### 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.
### PIPING TRADES

1. Select and inspect appropriate hardware and/or lifting equipment.
2. Demonstrate and/or simulate the proper techniques for connecting hitches.
3. Demonstrate the proper use of all hand signals according to ANSI B30.2 and B30.5.
4. Describe or demonstrate pre-lift safety checks.
5. Demonstrate and/or simulate how to lift the load level.
6. 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 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.

### PIPIFITTING LEVEL-I

10. Orientation to the Trade – 08101-06

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

### 11. Pipefitting Hand Tools- 08102-06

**Module Test Score _____**  
**Module Rating (4, 3, 2)**

1. Identify various pipefitting hand tools.
2. Secure a section of pipe in a vise and pipe stand.
3. Proper use:
   - Straight pipe wrenches
   - Offset pipe wrenches
   - Chain wrenches
   - Strap wrenches
4. Proper use:
   - Laser level
   - Torpedo and larger levels
   - Tubing water level
   - Center finder
5. Check square and level:
   - Turn tongue 180 degrees from where it was
   - Flip level to ensure it is level

### 12. Pipefitting Power Tools- 08103-06

**Module Test Score _____**  
**Module Rating (4, 3, 2)**

2. Operate a portable grinder.
3. Replace dies in a threading machine.
4. Cut, ream, and thread pipe using a threading machine.
5. Cut and thread nipples using a nipple chuck.
6. Thread pipe using a portable power drive.
7. Identify several types of pipe bevelers.

### 13. Oxyfuel Cutting- 08104-06

**Module Test Score _____**  
**Module Rating (4, 3, 2)**

1. Set up oxyfuel equipment.
2. Light and adjust an oxyfuel cutting torch.
3. Shut down oxyfuel cutting equipment.
4. Disassemble oxyfuel equipment.
5. Change empty cylinders.
6. Perform straight line and square shape cutting.
7. Perform piercing and slot cutting.
8. Perform bevel cutting.
14. Ladders and Scaffolds- 08105-06
Module Test Score ______  Module Rating (4, 3, 2)
_____  1. Select, inspect, and use straight and extension ladders.
_____  2. Erect, inspect, and disassemble tubular buck scaffolding.

15. Motorized Equipment- 08106-06
Module Test Score ______  Module Rating (4, 3, 2)
_____  1. Perform all prestart checks for engine-driven generators.
_____  2. Set up and operate engine-driven welding machines.
_____  3. Operate engine-driven generators.
_____  4. Perform all prestart checks for portable air compressors.
_____  5. Operate portable air compressors.
_____  6. Identify portable pumps to use for specific applications.
_____  7. Identify forklift trucks and recognize safety hazards involved in working around them.
_____  8. Identify types of hydraulic cranes and recognize safety hazards involved in working around them.

16. Introduction to the Plumbing Profession- 02101-12
Module Test Score ______
This is knowledge-based; there is no performance test.

17. Plumbing Safety- 02102-12
Module Test Score ______ Minimum 100% Required
Module Rating (4, 3, 2)
_____  1. Inspect the following personal protective equipment:
   • Gloves
   • Body Harness
   • Hard Hat
   • Safety Glasses
   • Safety Shoes
   • Hearing Protection
_____  2. Put on the following personal protective equipment:
   • Hard Hat
   • Body Harness
   • Eye Protection
   • Gloves

18. Tools of the Plumbing Trade - 02103-12
Module Test Score ______  Module Rating (4, 3, 2)
_____  1. Identify plumbing tools.
_____  2. Properly use plumbing tools.
_____  3. Demonstrate proper maintenance and storage of hand and power tools.

19. Introduction to Plumbing Math- 02104-12
Module Test Score ______  Module Rating (4, 3, 2)
_____  1. Measure pipe using the following methods:
   • End-to-end
   • End-to-center
   • Center-to-center
   • End-to-face
   • Face-to-face
   • Face-to-throat
_____  2. Determine end-to-end dimension by figuring fitting allowances and thread makeup.

20. Introduction to the Plumbing Drawings- 02105-12
Module Test Score ______  Module Rating (4, 3, 2)
_____  1. Sketch an orthographic and isometric drawing.

21. Plastic Pipe and Fittings- 02106-12
Module Test Score ______  Module Rating (4, 3, 2)
_____  1. Select correct types of materials for plastic piping systems.
_____  2. Identify types of fittings and valves and their uses.
_____  3. Select the appropriate personal protective equipment for working with plastic piping.
_____  4. Properly measure, cut, and join plastic piping.
_____  5. Select the correct support and spacing for the application.
22. Copper Tube and Fittings- 02107-12

Module Test Score _______

Module Rating (4, 3, 2)

_____ 1. Select correct types of materials for copper tube systems.
_____ 2. Identify types of fittings and valves and their uses.
_____ 3. Select the appropriate personal protective equipment for working with copper tube.
_____ 4. Correctly measure, cut, ream, and join copper tube.
_____ 5. Select the correct support and spacing for the application.

23. Cast-Iron Pipe and Fittings- 02108-12

Module Test Score _______

Module Rating (4, 3, 2)

_____ 1. Select correct types of materials for cast-iron piping systems.
_____ 2. Identify types of fittings and their uses.
_____ 3. Select the appropriate personal protective equipment for cast-iron piping.
_____ 4. Correctly measure, cut, and join cast-iron pipe.
_____ 5. Select the correct hanger or support and spacing for the application.

24. Steel Pipe and Fittings- 02109-12

Module Test Score _______

Module Rating (4, 3, 2)

_____ 1. Identify the common types of materials, schedules, sizes, and labels used for steel piping.
_____ 2. Identify the common fittings and valves used with steel piping.
_____ 3. Properly measure, cut, and join steel piping.
_____ 4. Identify the hazards and safety precautions associated with steel piping.
_____ 5. Identify the various techniques used in hanging and supporting steel piping.

25. Introduction to Plumbing Fixtures- 02110-12

Module Test Score _______

Module Rating (4, 3, 2)

_____ 1. Identify the most commonly installed fixtures and appliances.

26. Introduction to Drain, Waste, Vent (DWV) Systems- 02111-12

Module Test Score _______

Module Rating (4, 3, 2)

_____ 1. Sketch an isometric drawing of a simple DWV system and label its components.

27. Introduction to Water Distribution Systems- 02112-12

Module Test Score _______

Module Rating (4, 3, 2)

_____ 1. Sketch an isometric drawing of a simple water distribution system and label its components.

Number of Skills Completed +

90 Number of Skills on Level I Piping/Plumbing Trades =

% of Skills Comp

Conference
Date: ________________ Hours in class: ______
Comments:

Teacher initial: _______ Student initial: _______