This document is meant to be a **CONDENSED SUMMARY** of module assessments and performance testing required for a student to achieve the **NCCER Welding Level I Certification**. The actual NCCER Performance Profile packet should be studied, referenced, and used for instructor planning and execution of Level I certification for students. NCCER Performance Profiles Links:

#### Core Curriculum

#### Welding Level I

In order for students to receive the NCCER Level 1 credential, the following criteria must be met

- 1. Facility must be an NCCER Accredited Training & Education Facility (ATEF)
- 2. Instructors must have a current NCCER Craft Instructor Certification in the applicable trade area
- 3. NCCER Registration and Release Form must be on file for each student receiving credential
- 4. All Core and Level I written/electronic assessments and Performance Profile assessments must be passed and NCCER testing procedures followed.

### NCCER Core Curriculum: Module and Performance Profile Summary (5<sup>th</sup> Edition)

#### Module Performance Profile

Basic Safety (00101-15)	1. Extension ladder
	2. PPE inspection
	3. PPE fitting/removal
	4. Power cord/GFCI inspection
Construction Math (00102-15)	No Performance Testing Required for this Module
Introduction to Hand Tools	<ol> <li>Visual inspection of 5 hand tools</li> </ol>
(00103-15)	<ol><li>Safe and proper use of 3 hand tools</li></ol>
	3. Make a straight, square cut in lumber
Introduction to Power Tools (00104-15)	Demonstrate the safe use of 3 power tools
Introduction to Construction	Using floor plan supplied with module:
Drawings (00105-15)	1. Locate walls
	2. Identify width
	3. Determine distances between walls
	4. Determine elevation of slab
Introduction to Basic Rigging	<ol> <li>Demonstrate ASME Emergency Stop hand signal</li> </ol>
(00106-15)	
*Optional for Level I Certification	
Basic Communication Skills	Perform a task after oral instructions
(00107-15)	2. Work related form
	3. Read and interpret instructions for donning PPE, oral
	instruction
Basic Employability Skills	No Performance Testing Required for this Module
(00108-15)	
Introduction to Materials	<ol> <li>Demonstrate safe manual lifting</li> </ol>
Handling (00109-15)	2. Demonstrate how to tie 2 common knots

# NCCER Welding I Curriculum: Module and Performance Profile Summary (5<sup>th</sup> Edition)

## Module

## Performance Profile

Welding Safety (29101-15)	Performance testing is not required for this module
Oxyfuel Cutting (29102-15)	Set up oxyfuel cutting equipment
	2. Light and adjust an oxyfuel torch
	3. Shutdown oxyfuel cutting equipment
	4. Disassemble oxyfuel cutting equipment
	5. Change empty gas cylinders
	6. Cut shapes from various thicknesses of steel
	7. Perform washing
	8. Perform gouging
	9. Use a track burner to cut straight lines and bevels
Plasma Arc Cutting (029103-15)	Set up plasma arc cutting equipment
	2. Setting amperage and gas pressures or flow rates
	3. Square-cut metal
	4. Bevel-cut metal
	5. Pierce and cut slots in metal
	6. Dismantle and store equipment
Air-Carbon Arc Cutting and	Select and install electrodes
Gouging (29104-15)	2. Prepare work area and equipment for safe operation
	3. Use air-carbon arc cutting equipment for washing
	4. Use equipment for gouging
	5. Perform storage and housekeeping activities for equipment
Base Metal Preparation	1. Mechanically or hand grind 22.5 degree bevel on steel plate
(29105-15)	2. Thermally bevel steel plate at 22.5 degrees
Weld Quality	1. Perform a visual inspection on a fillet and/or groove weld
(29106-15)	and complete an inspection report
SMAW – Equipment and Setup	Set up a machine for SMAW
(29107-15)	
SMAW Electrodes (29108-15)	No performance testing required for this module
SMAW – Beads and Fillet Welds	Set up welding equipment
(29109-15)	2. Strike an arc
	3. Make stringer, weave, and overlapping beads
	4. Make corner welds
	5. Make fillet welds in specified positions (flat, horizontal,
	vertical, overhead)
Joint Fit-Up and Alignment	1. Fit up joints using plate and pipe fit-up tools
(29110-15)	2. Check the joint for proper fit-up using gauges and
	measuring devices
SMAW – Groove Welds with	Set up arc welding equipment
Backing (29111-15)	2. Make flat, horizontal, vertical, and overhead welds with
	backing on V-groove joints
SMAW – Open-Root Groove	1. Make open V-groove welds in the following positions: Flat,
Welds - Plate (29112-15)	Horizontal, Vertical, Overhead