

	Title:	Welding Level 1
	Edition:	6
	Publication Date:	2022
	Additional Instructor Requirement(s):	None
	Prerequisite(s):	Core
	Previous Edition Expiration Date:	www.nccer.org/expirations



Book Module Number	Module Name	5 th Edition Mod ID #	6 th Edition Mod ID #	6 th Edition Hours	5 th Edition Hours	Equivalent Registry Module(s)	Performance Profile	Comments
---	Core	---	---	77.5	72.5	---	---	<ul style="list-style-type: none"> Core, 6th edition Hours increased based on addition of new module.
1	Welding Safety	29101-15	29101	5	5	29101-15	No	<ul style="list-style-type: none"> Strengthened content on safety guidelines, fire extinguishers and toxic metal fumes Improved clarity and reading grade level Replaced photos with newer ones and varied welding brands
2	Oxyfuel Cutting	29102-15	29102	17.5	17.5	29102-15	Yes	<ul style="list-style-type: none"> Added new content on gas pressure and interpreting pressure gauges Improved and clarified oxyfuel procedures, especially torch leak-down testing Updated the PAT Improved clarity and reading grade level
3	Plasma Arc Cutting	29103-15	29103	7.5	7.5	29103-15	Yes	<ul style="list-style-type: none"> Updated and clarified safety guidelines for cutting and welding containers that may have contained flammable, explosive, or toxic materials Updated the PAT Improved clarity and reading grade level
4	Air Carbon Arc Cutting and Gouging	29104-15	29104	5	10	29104-15	Yes	<ul style="list-style-type: none"> Added new graphical lens shade guide created from OSHA data Improved clarity and reading grade level
5	Base Metal Preparation	29105-15	29105	10	12.5	29105-15	Yes	<ul style="list-style-type: none"> Improved the weldment load explanations Improved the weld type and weld preparation content Updated several graphics to show correct weld preparations for the weld type Updated the PATs
6	Weld Quality	29106-15	29106	10	10	29106-15	Yes	<ul style="list-style-type: none"> Updated the AWS Welding Procedure Specification example to the 2020 version Improved weld feature graphics Improved weld testing content Improved weld test specimen (AWS, ASME, and API) graphics
7	SMAW - Equipment and Setup	29107-15	29107	5	5	29107-15	Yes	<ul style="list-style-type: none"> Strengthened content on toxic metal fumes Added new content on conventional welding machine startup Added new content on engine-driven welding machine startup Improved clarity and reading grade level
8	SMAW Electrodes	29108-15	29108	2.5	2.5	29108-15	No	<ul style="list-style-type: none"> Replaced several photos with newer ones or those of other welding brands Improved explanation of the AWS electrode classification system Removed old MSDS info and replaced with current SDS examples
9	SMAW - Beads and Fillet Welds	29109-15	29109	100	100	29109-15	Yes	<ul style="list-style-type: none"> Updated the weld feature definitions and associated graphics Improved explanation of travel and work angles Added new Feature comparing learn to weld to learning to drive Added new content explaining how to produce tack welds
Deleted	Joint Fit-up and Alignment	29110-15	29110	5	5	29110-15	Yes	<ul style="list-style-type: none"> Improved explanation and graphics introducing weldment thermal distortion Updated the weld feature definitions and associated graphics Clarified working with socket welds and setting the proper gap
Deleted	SMAW - Groove Welds with Backing	29111-15	29111	60	50	29111-15	Yes	<ul style="list-style-type: none"> Added a new graphic illustrating acceptable/unacceptable weld profiles Improved weld preparation content and associated graphics
	SMAW - Open Root Groove Welds - Plate	29112-15	29112	60	60	29112-15	Yes	<ul style="list-style-type: none"> Added a new graphic illustrating acceptable/unacceptable weld profiles Clarified all welding instructions and their associated graphics Updated the PATs
				Total Hours	365	357.5		

Definitions:

- Lock-Down Module:** A module adopted “as-is” from another craft or an earlier edition of the same curriculum.
- Equivalent Module:** A module whose learning and performance outcomes match those of the newer editions and is therefore considered ‘equivalent’ in NCCER’s Registry.
- Interim Credential:** A module, or group of modules, whose learning and performance outcomes demonstrates competence of specific components in an occupational area and results in a unique credential in the Registry.

Color Highlight Legend:

- = No Performance Test
- = Lock-Down Module
- = Equivalent Module
- = Deleted