

SME Course Outline Report

College: Lakeland Community College

Specific Course: WELD 2320 Advanced SMAW (Stick) Welding

Prepared By: Charles Cross, Consultant

Date Completed: 5/31/18

Submitted To: Lorain County Community College

Consultant Credentials: Charles Cross has a B.S. in Technology Education, M.Ed. in Technology Education, and is an American Welding Society (AWS) Certified Welding Inspector (CWI), Certified Welding Educator (CWE), and Certified Welding Supervisor (CWS). Mr. Cross gained tenure in public education as an Industrial Arts/Technology Education Instructor prior to his current employment earning a Golden Apple Award. Mr. Cross has been at his current employer, Lincoln Electric for over six years and is currently the Senior Customer Training Instructor at the Welding Technology Training Center. Current focus areas are industrial/educational training around welding and welding technologies.

Evaluation Method: The rubric below was used to evaluate that core curricula meets industry standards.

Review Scale Definitions:

0: Evident

1: Not Evident

N/A: Not Applicable

1. Program/Course Overview: <i>The overall design of this course is made clear to the student.</i>	Evident	Not Evident	N/A
1.1 The program/course outcomes are clearly stated.			
1.2 Prerequisites and/or any competencies are clearly stated.			
1.3 Learning outcomes are specific and appropriately designed for course.			
1.4 Course outcomes align to an occupational focus.			
Comments or recommendations: It is nice to see the appropriate prerequisites for this course. Students should have enough time to focus on welding in the vertical and overhead positions. This course outline references AWS D1.1 and ASME to support industry standards.			
2. Resources and Materials: <i>Instruction materials align with stated course outcomes.</i>	Evident	Not Evident	N/A
2.1 The course materials, activities, and outcomes are relevant/reflect industry workforce development needs.	X		
2.2 The instructional materials on course content provide quality options for different learning styles.	X		
2.3 The learning activities are designed at an appropriate level for the course.	X		
2.4 Equipment/technology support course learning outcomes and are relevant to industry.	X		
Comments or recommendations: Items required by the student are present in the course description. It is nice to see a variation of electrodes and thicknesses of material which is realistic for students when they enter industry.			

3. Learner Activities and Relevancy: <i>Course outcomes are relevant to students, industry and employers.</i>	Evident	Not Evident	N/A
3.1 Course outcomes provide content that is relevant to industry and employers.	X		
3.2 Instruction, activities, and assignments are relevant and engaging to students.	X		
3.3 Learning activities align to industry workforce development initiatives.	X		
Comments or recommendations: This is an appropriate course where students focus on SMAW in the vertical and overhead positions. It is also nice to see the students will gain hands on project experience to stay engaged. Topics such as weld quality, inspection, advanced electrode and machine options among others are present in the course outline to add student and industry relevance.			
4. Assessment and Measurement: <i>Assessment strategies use established ways to measure effective learning, evaluate student progress by reference, to stated learning outcomes, and are designed to be integral to the learning process.</i>	Evident	Not Evident	N/A
4.1 The course evaluation criteria/course grading policy is stated clearly on the outline.	X		
4.2 Course-level assessments measure the stated learning outcomes and are consistent with course activities and resources.	X		
4.3 Assessments are varied and appropriate to the content being assessed.	X		
Comments or recommendations: It is nice to see the students have the opportunity to get an industry recognized certification of qualification with this course. Several instructional procedures and grading procedures are addressed in the course outline.			

Overall Summary:

This course outline on Advanced SMAW (Stick) Welding notes at the top of the course outline that it is a work in process, not yet approved; however it is a model for duplication and aligns to industry standards. This course gives students the ability to just focus on welding in the vertical and overhead positions. A recommendation would be to modify Clause 4 and 5 from Section II, Part A; change “Tip to work distance” to “Arc Length” and “Tip Location” to “Position” since this is referencing the SMAW process. As a recommendation, it may be valuable to add ANSI Z49.1 as topic in the course outline to cover other safety topics not mentioned. Another safety reference that may add value to use is the American Welding Society Safety & Health Fact Sheets.

Reviewers Signature: Charles Cross

Date: 5/31/18

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