

SME Course Outline Report

College: Lakeland Community College

Specific Course Reviewed: WELD 1030 Arc Welding Fundamentals

Prepared By: Charles Cross, Consultant

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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.	X		
1.2 Prerequisites and/or any competencies are clearly stated.			X
1.3 Learning outcomes are specific and appropriately designed for course.	X		
1.4 Course outcomes align to an occupational focus.	X		
Comments or recommendations: It is nice to see a diverse range of welding topics in a fundamentals welding course. There are no prerequisites for this course.			
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: It may add value to investigate using virtual reality welding trainers since there is no lab time that consists of hands-on welding time.			

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: Course outline includes topics that are relevant to industry standards. Since there is no hands-on welding time, there are several fundamentals included in this course that are relevant around hands-on welding.			
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: Instructional delivery will be through lecture, demonstration, and visual media when appropriate covering a diverse group of learning styles.			

Overall Summary:

This course outline provides a diverse range of topics around welding. It is nice to see the diversity of topics reaching the students in a fundamentals course that has no prerequisite. Since there is no hands-on lab time, it may add value to investigate the use of virtual welding machines to help explain key topics and add additional relevance to students. Welding health and safety is located at the end of this course instead of the beginning which may add more value to the beginning. There are factors around welding safety that are not listed in the course outline. 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: 5/26/18

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