SME Course Syllabus Report

College: Lakeland Community College

Specific Course Reviewed: WELD 2340 Advanced FCAW (Flux Cored) Welding

Prepared By: Charles Cross, Consultant

Date Completed: 6/2/18

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: *The overall design of this course is made clear to the student.*	**Evident**	**Not Evident**	**N/A**
1.1 The program/course objectives are clearly stated.	X		
1.2 Learning objectives are specific and appropriately designed for course.	X		
1.3 Learning objectives describe outcomes that are measurable.	X		
1.4 Course objectives/outcomes align to an occupational focus	X		
Comments or recommendations: It is nice that this advanced course is just dedicated to FCAW. This course aligns with industry referencing AWS D1.1 in the outcomes and course objectives.			
2. Resources and Materials: *Instruction materials align with stated course objectives and outcomes.*	**Evident**	**Not Evident**	**N/A**
2.1 The instructional materials contribute to the achievement of the stated course learning objectives.	X		
2.2 The course materials, activities, and outcomes are relevant/reflect industry workforce development needs.	X		
2.3 The instructional materials on course content provide quality options for different learning styles.	X		
2.4 The learning activities are designed at an appropriate level for the course.	X		
2.5 Equipment/technology support course learning objectives and are relevant to industry.	X		
Comments or recommendations: There is no textbook required and the course schedule is blank, however it is up to the discretion of the instructor. A variety of machine setup, consumable, and steel are necessary for students to explore FCAW. Items students must furnish are clearly stated in course description.			

3. Learner Activities and Relevancy: *Course objectives and outcomes are relevant to students, industry and employers.*	**Evident**	**Not Evident**	**N/A**
3.1 Learning objectives describe outcomes that are measurable.	X		
3.2 Course outcomes and objectives provide content that is relevant to industry and employers.	X		
3.3 Instruction, activities, and assignments are relevant to and engaging to students.	X		
3.4 Learning activities align to industry workforce development initiatives.	X		
Comments or recommendations: Student activities align with industry going welding with the self-shielded process to the gas shielded process. Students should remain engaged welding in the vertical and overhead positions. Students also gain troubleshooting and project experience among others topics to align with industry.			
4. Assessment and Measurement: *Assessment strategies use established ways to measure effective learning, evaluate student progress by reference, to stated learning objectives, and are designed to be integral to the learning process.*	**Evident**	**Not Evident**	**N/A**
4.1 The course evaluation criteria/course grading policy is stated clearly on the syllabus.	X		
4.2 Course-level assessments measure the stated learning objectives 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 and grading procedures provide several avenues to evaluate student competency.			

Overall Summary:

This course syllabus on advanced FCAW is a model and aligns to industry standards. This advanced course has students focus on welding FCAW in the vertical and overhead positions to build confidence. Several references to the American Welding Society are present throughout the course outline supporting industry initiatives. 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: 6/2/18**

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