SME Course Syllabus Report

College: Lakeland Community College

Specific Course Reviewed: WELD 1300 Thermal Cutting, Gouging, Soldering, and Brazing

Prepared By: Charles Cross, Consultant

Date Completed: 5/27/18

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:			
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 listed on the course syllabus as a requirement. Students may want literature listed to reference. It is nice to see automation examples like the CNC table included in this course.			

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: It is nice to see a portion on project based learning to keep student engagement and measure student competency within scope of the course.			

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: Course schedule table is left blank. There are a variety of methods of presentation and the grading and basis for grades is clear with a wide range of assessments.			

Overall Summary:

This course syllabus is a model for duplication of a course on thermal cutting, gouging, brazing, and soldering. The scope of the course is relevant to industry and it is nice to see a course dedicated to thermal cutting, brazing and soldering as they complement each other in the welding industry. A list of textbooks or guides would be valuable if added, but that falls under the discretion of the instructor. It is nice to see automation relevance in this course with the integration of a CNC table. There are factors around welding safety that are not listed in the course outline in section I. 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. It may also add value to remove the sizes in gauge and use inches as ferrous and nonferrous metal gauge sizes differ.

Reviewers Signature: *Charles Cross* **Date: 5/27/18**

This work is adapted from the TREND Consortium Curriculum Review, Michigan Coalition for Advanced Manufacturing Subject Matter Expert Course Review, and the South West Arkansas Community College Consortium Syllabus Evaluation, all licensed under the Creative Commons Attribution 4.0 International License.

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