SME Course Outline Report

College: Lakeland Community College

Specific Course WELD 1040 Introduction to Metal Fabrication and Mechanized Welding

Prepared By: Charles Cross, Consultant

Date Completed: 5/26/18

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 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: There is no prerequisite required for this course.			
2. Resources and Materials: *Instruction materials align with stated course outcomes.*	**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: A variety of key areas of metal fabrication mechanized welding topics are covered. It may add value to introduce students to hard automation using a simple modular drive system before going into robotic welding.			

3. Learner Activities and Relevancy: *Course outcomes are relevant to students, industry and employers.*	**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: Having a blended approach of lecture and lab are relevant to industry and necessary for this type of course. A lot of topics are covered in this course to keep students engaged. It may add value to have a final hands-on project at the end of the course integrating key topics covered.			
4. Assessment and Measurement: *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.*	**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: A variety of grading procedures are present to ensure student competency.			

Overall Summary:

This course outline combines metal fabrication with and mechanized welding and is a model that represents the capability to be duplicated. This course outline entails industry relevance as it provides students with metal fabrication and takes students to higher level of knowledge integrating mechanized welding. It may add value to integrate a bug or track system for semi-automatic welding processes like GMAW before going into Robotic welding. It also may add value to cover the difference between pipe and tube in section X.

Reviewers Signature: Charles Cross **Date: 5/26/18**

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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