SME Course Outline Report

College: Lakeland Community College

Specific Course: WELD2370 Advanced Pipe Welding

Prepared By: Charles Cross, Consultant

Date Completed: 6/9/2018

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: Prerequisites are listed, however, it may add value to list the prerequisite for basic pipe welding course. References of AWS, ASME, and API provide in the course description to support industry standards.			

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: It is nice to see that ANSI Z49.1 is built into the course outline. It is also nice to see the students are using 6" scheduled 40 & 80 pipe to weld on whether they are welding to ASME Section IX or API 1104. Items students must furnish are listed in the course description.			

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: It is nice that students will choose which direction they want to focus on (API or ASME) which is a major benefit. Since this course is advanced it focuses on welding in the 5G and 6G positions. Students will also benefit from the knowledge on how to fit-up and prepare the pipe specimen before welding on it.			
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: Several instructional procedures may be used and the grading procedures involve a wide range of methods to evaluate student performance. Students have the opportunity to pass an industry recognized certification of qualification from a 3rd party.			

Overall Summary:

This course outline on Advanced Pipe Welding is a model and aligns to industry standards; however the top is stated this is a work-in process version, not yet approved. It is nice to see a portion in the outline dedicated to students preparing and fitting up the pipe.   Since this is an advanced course, it is nice to see the course focusing on welding positions in the 5G and 6G positions. Several references to AWS, ASME, and API are present throughout the course outline supporting industry initiatives. An additional safety reference that may add value is the American Welding Society Safety & Health Fact Sheets.

Reviewers Signature: *Charles Cross*   **Date:** 6/9/18

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