

CE Program Advisory Committee Meeting Welding

June 4, 2021
Zoom Virtual Meeting Room
Meeting Convened at 11:00 a.m.
Meeting Adjourned at 1:27 p.m.
Facilitators: Eric Budwig, Michael Lannom

2020-2021

COMMITTEE MEMBERS

Eileen Boyd, Senior Safety Services Professional, Disney Resort

Hector Carbajal, Organizer, Local 250, Southern California Pipe Trades

Steve Chirrick, VP Manufacturing Operations, Cord Automotive International

Adam Elliot, Organizer, UA Local 582

Robert James, Business Agent Local 582,

Plumbers, Steamfitters, Welders & Apprentices

Crystal Lewis, Organizer, UA Local 250

David Luttrell, Technical Outside Sales Rep.,

Harris/ Lincoln Electric Company

Patrick Monahan, Owner,

Monahan Welding and Fabrication, Inc.

Cliff Steel, Weld Press Specialist CWS, Airgas USA

Nathaniel Williams, UA Local 250

EX-OFFICIO

Eric Budwig, Faculty, OCC
Elaine Devlin, Professional Expert,
Career Education, OCC
Michael Lannom, Faculty, OCC
John Maxwell,
Instructional Associate, OCC
Daniel Shrader, Dean, Technology, OCC

Linda Thomas, Graduate of OCC

ADVISORY COMMITTEE MEETING SUMMARY

1. Welcome & Introductions

- Committee members introduced themselves and confirmed their respective titles and roles at their respective companies.
- Eric Budwig reviewed the role and responsibilities of this meeting as follows:
 - Review and access the structure, program-level outcomes and curriculum of the Early Childhood Education Program;
 - Ratify and recommend changes to program structure, PSLOs and curriculum so that the program and curriculum align to stated occupational outcomes and industry needs and requirements.

2. Program Outcome Data

Reviewed and ratified the changes of Existing Low-unit Certificates and Program Level Student Learning Outcomes (PLOs)

New additions to the PLOs wording are in red print and words to be deleted are crossed out.

- Basic Welding (SMAW):
 - Changes: Students will be able to weld various SMAW electrodes in the flat position and acquire the necessary skills training safety training for proficiency required entrylevel employment.
 - The newly ratified PLO will read: Students will be able to weld various SMAW electrodes in the flat position and acquire the necessary safety training for entry-level employment.

- Intermediate Welding (SMAW):
 - Changes: Students will be able to weld SMAW in the flat and horizontal positions, and have the
 math skills acquire the necessary for entry level employment. skills training for proficiency in taking a
 welding qualification test for certification which may be required.
 - The newly ratified PLO will read: Students will be able to weld SMAW in the flat and horizontal positions, and have the math skills necessary for entry-level employment.
- Advanced Welding (SMAW):
 - Changes: Students will have the necessary SMAW skills to weld in the flat, horizontal, and vertical
 positions and will be prepared to take the Los Angeles City Structural Steel Certification Test
 needed for entry-level employment.
 - Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment
 - Improve or develop additional proficiencies required for professional growth or advancement in their current employment.
 - The newly ratified PLO will read: Students will have the necessary SMAW skills to weld in the flat, horizontal, and vertical positions and will be prepared to take the Los Angeles City Structural Steel Certification Test needed for entry-level employment.
- Advanced I Welding (FCAW):
 - Changes: Students will have the necessary skills to weld both inner shield and dual shield flux core
 in the flat and horizontal positions for proficiency required for entry-level employment.
 - Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
 - Improve or develop additional proficiencies required for professional growth or advancement in their current employment.
 - The newly ratified PLO will read: Students will have the necessary skills to weld both inner shield and dual shield flux core in the flat and horizontal positions for proficiency required for entry-level employment.
- Advanced II Welding (FCAW):
 - Changes: Students will have the necessary skills in both inner shield and dual shield flux core in the vertical and overhead positions and will be prepared to take the Los Angeles City Semi-Automatic Certification Test needed for entry-level employment.
 - Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
 - Improve or develop additional proficiencies required for professional growth or advancement in their current employment.
 - The newly ratified PLO will read: Students will have the necessary skills in both inner shield and dual shield flux core in the vertical and overhead positions and will be prepared to take the Los Angeles City Semi-Automatic Certification Test needed for entry level employment.
- Gas Metal Arc Welding (GMAW):
 - Changes: Students will have the necessary skills in Gas Metal Arc Welding (GMAW) needed for entry-level employment.
 - Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
 - Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

•	The newly ratified PLO will read: Students will have the necessary skills in Gas Metal Arc Weldin
	(GMAW) needed for entry-level employment.
	
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Gas Tungsten Arc Welding (GTAW):

- Changes: Students will have the necessary skills in Gas Tungsten Arc Welding (GTAW) needed for entry-level employment.
 - Acquire the necessary skills training for proficiency in taking a welding qualification testfor certification which may be required for employment.
 - Improve or develop additional proficiencies required for professional growth or advancement in their current employment.
- The newly ratified PLO will read: Students will have the necessary skills in Gas Tungsten Arc Welding (GTAW) for entry-level employment.

o Orbital Welding:

- Changes: Students will have the necessary Perform welds on pipe or tubing using orbital welding skills on pipe or tubing equipment to the standards of AWS and ASME Code necessary for entry level employment.
- The newly ratified PLO will read: Students will have the necessary orbital welding skills on pipe or tubing to the standards of AWS and ASME Code necessary for entry level employment.

o Pipe

- The committee agreed to leave the PLO "as is" for Pipe until it reviews the certificate at the next meeting planned to be held in six months.
 - Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
 - Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

Welding Technology:

- The committee ratified the following existing PLOs for the welding certificate.
 - Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
 - Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

• **Biennial Program Review** (Attached)

- The committee will review occupation/job titles and codes and wage information at the next meeting in 2021; Committee ratifies "as is" or suggests new or different job/occupational outcomes (titles) and indicates prevailing wages, as appropriate.
- Enrollment and Completer Status and Trends
- Licensure/certification exam pass rates: N/A
- Employment Outcome Data
 - Institution Set Standard

Institution Set	Job Placement Rate (%)			
Standard (%)	2016	2017	2018	2019
75%	84.29	83.54	88.46	78.46

• Perkins Program Core Indicators (Attached)

 Committee will make suggestions for improvements in recruitment, instruction/ retention, or job referral/placement of special populations sub-groups represented at the next meeting in 2021.

3. Reviewed Last Advisory Committee Recommendations and Progress Report

Last Meeting Date: January 23, 2020

- New or Revision of Curriculum/Classes:
 - Add robotics curriculum/courses- most likely there will then be a need for an additional full-time instructor
 - Add friction stir curriculum/ courses
 - Add classes that teach rigging

New Equipment/Technology

- Waiting for monies for one or two more orbital welders
- Waiting for monies for more storage space and to add a Conex box (shipping container) to get equipment out of the classroom
- Waiting for monies for Obtain a flat-bed truck to pick up metal donations
- Waiting for monies for Obtain a facing tool ¼ 2" (orbital)
- Obtained monies to continue to upgrade welding machines in main lab and need to get them installed.
- Waiting for monies to upgrade electrical system for safety and to meet the voltage of the new machines- Lisa Knuppel said there may be funding for electrical upgrades
- o Waiting for monies to obtain an overhead crane to move big pieces safely
- Everything going through presidential committee
- Other recommendations for program improvement

Design a program to transition students from a formalized program like that at OCC to an industry apprenticeship (Have not done due to COVID)

Offer Open Houses (Have not done because of COVID)

Review and Ratification of New Program Proposals/Developments

- Curriculum
 - The committee reaffirmed the value of the existing certificates programs and recommends that they continue, subject to the following revisions and/or additions to coursework or program structure.
 - Add courses to certificates to include math classes and Blueprint reading courses.
 - Considered adding math courses to the program
 - Make math classes a prerequisite to the program, difficult in these times when colleges are getting rid of math placement testing and prerequisites
 - o Consider having non-credit math courses and create them
- Equipment/Facilities
 - o Resubmit any unfunded requests from the last ARRs submitted
 - o Get more physical space to meet the needs of the program

Work-Based Learning Opportunities

Overview of existing work-based learning elements of program and gaps or needs

Students need the basics of using hand tools.

Advisor recommendations and referrals for new internships or apprenticeship opportunities

Industry Update & Employment Trends

- Emerging technologies and industry developments impacting instructional programs
- Industry hiring practices and trends

	Locking for atudents with atranger moth skills
ш	Looking for students with stronger math skills.
	Looking for students with who know how to do math in their head and with a calculator on
	job sites.
	Locking for students that one de blueprint reading

☐ Looking for students that can do blueprint reading.

Summary of Recommendations

- All existing certificate programs in Welding are reaffirmed and recommended to continue, subject to changes recommended.
- New or Revision of Curriculum/Classes or Program Structure
 - The committee recommended and ratified adding the Construction Safety Cal OSHA class to the Basic Welding (SMAW) certificate.

Students will gain a 30 hour safety core.

Look into welding students taking non-credit math courses while getting welding certificates.

Those non-credit courses would need to be developed

Would be good for students that need the math help

Students that don't need the help can go through the program without being slowed down.

- Maybe add the Tech 040 course in one certificate
- The committee recommended and ratified to make the following changes to the Intermediate Welding Certificate:
 - Make the Intermediate Welding Certificate build on the basic Welding certificate. To do the Intermediate Welding (SMAW) certificate, the student must do the Basic Welding (SMAW) certificate
 - Add a math course, Build A120, to the Intermediate Welding (SMAW) Certificate.
- The committee recommended and ratified to make the following changes to the Advanced Welding Certificate:
 - Build on the Intermediate Welding (SMAW) certificate
 - Students must complete the Intermediate Welding (SMAW) certificate to do the Advance Welding (SMAW) Certificate
 - Need the math skills to do the blueprint reading
 - Add Blueprint Reading, WELD A180, which prepares students for LA City Certification Test.
- The committee recommended and ratified to make the advanced Welding I (FCAW) Certificate build on the Advanced (SMAW) Welding certificate.
 - A student must complete the Advanced Welding (SMAW) certificate to do the Advance Welding 1 (FCAW) certificate.
 - Weld A108 class prepares them for welding in the flat and horizontal position
- The committee recommended and ratified to make the advanced Welding II certificate build on the Advanced 1 (FCAW) Welding certificate. A student must complete the Welding 1 (FCAW) certificate to do the Advance Welding II (FCAW) certificate.
- The committee recommended and ratified the following changes to the Gas Metal Arc Welding (GMAW) certificate:
 - Remove Weld A200 or A201
 - Make the Basic Welding (SMAW) certificate a prerequisite for the Gas Metal Arc Welding (GMAW) certificate.
 - Add Weld A120, Blueprint Reading Weld A180, Weld A211, and Weld A212
- The committee recommended and ratified the following changes to the Gas Tungsten Arc Welding (GTAW) certificate:
 - Make the Basic Welding (SMAW) certificate a prerequisite
 - Add Weld A180, Weld A120, and Weld A131 Orbital welding
- The committee recommended and ratified to remove Weld A230 from Orbital Welding and add Weld A130, but Michael Lannom to check with Space X first to see how they feel about it as they hire many of OCC's welding graduates.
- The committee recommended and ratified to make the Advanced Welding (SMAW) certificate a prerequisite for the Pipe certificate.
- Look into having the Pipe Certificate to include some non-credit courses which need to be developed.
 - The program will look at this certificate to improve it.
 - Most technical and most difficult of welding certificates
 - Very few students are ready to take a Pipe Welding Test after 2 years at OCC
 - Consider adding the second level of pipe welding course to the certificate
 - Revisit this certificate at the next meeting.
- The committee ratified that the Welding Technology Certificate remove the freshman composition course, ENG A100, and replace it with the CONST A165 (OSHA class).
- New Equipment/Technology
 - Resubmit any unfunded requests listed in the last meetings notes
 - Get more physical space to meet the needs of the program
- Other recommendations for program improvement
 - Add hoisting and rigging opportunities into the program

- Plan on meeting in October to go over changes to the curriculum and to go over Perkins and Biennial Reviews
- Michael Lannom to talk to Steve Chirrick about the aluminum metal inert gas (MIG) program the welding program is building.

8. Closing Remarks

 Eric Budwig and Michael Lannom thanked everything for coming and asked everyone to plan on meeting again in late fall sometime around October.