Treasure Valley Community College
Welding/Industrial Manufacturing
Industrial Advisory Committee-Minutes (unapproved)
Friday, June 11, 2021

Attendance: David Koehler, Luke Folke, Sandy Porter, Angela Atha, Brandon Eichler, Tito Machuca, Mike Snyder, Robert Post and Dave Malmberg.

I. Introductions

II. Update from last meeting & subsequent feedback from committee

Summary of feedback regarding the assessment of program learning outcomes.

Please see the results listed below. Based on the feedback, we will approve the proposed PLO's and reaffirm the existing PLO's. Thank you so much for your feedback for our welding instructors as we continue to watch how each course flows. (Next Step -> Present at Academic Council)

Welding:

PLO – Proposed in Bold
Proper set up of welding machines for appropriate welding processes
Appropriate shop safety procedures and equipment
Proper welding techniques for all positions in SMAW, FCAW, GTAW, and GMAW processes
Proper welding techniques for qualification tests
Advanced welding techniques in stainless steel and aluminum welding
Advanced layout and fabrication procedures for welding projects
Practice and apply the proper steps and procedures when solving problems and repairing systems
Identify and troubleshoot electrical, mechanical, hydraulic, and pneumatic problems in systems

Relevance of PLOs

PLOs as presented are relevant for industry.
Approve the proposed PLOs, Reaffirm existing PLOs.

Priority of PLOs

#1 Appropriate shop safety procedures and equipment
#2 Proper set up of welding machines for appropriate welding processes
#3 Proper welding techniques for all positions in SMAW, FCAW, GTAW, and GMAW processes
#4 Advanced layout and fabrication procedures for welding projects

#4 Identify and troubleshoot electrical, mechanical, hydraulic, and pneumatic problems in systems
#6 Proper welding techniques for qualification tests
#6 Advanced welding techniques in stainless steel and aluminum welding
#6 Practice and apply the proper steps and procedures when solving problems and repairing systems

Does Sequence Exist for PLOs

#1 Appropriate shop safety procedures and equipment
#1 Proper set up of welding machines for appropriate welding processes
#3 Proper welding techniques for all positions in SMAW, FCAW, GTAW, and GMAW processes
#3 Identify and troubleshoot electrical, mechanical, hydraulic, and pneumatic problems in systems
#5 Advanced layout and fabrication procedures for welding projects
#5 Proper welding techniques for qualification tests
#5 Advanced welding techniques in stainless steel and aluminum welding
#5 Practice and apply the proper steps and procedures when solving problems and repairing systems

IMAC

PLO – Proposed in Bold
Demonstrate proper safety procedures when performing minor troubleshooting repairs
Devise maintenance routines for mechanical, hydraulic, and pneumatic systems
Employ appropriate diagnostic tools to troubleshoot, repair, and/or maintain production systems
Student will be able to calculate total system amperage, voltage, and wattage
Student will be able to connect motors, electrical connections, and controllers to allow a PLC to properly operate a machine
Student will be able to correctly demonstrate and perform periodic maintenance procedures
Student will be able to troubleshoot system for errors or malfunctions
Setup and operate basic welds using OAW, SMAW, GMAW, FCAW, GTAW, and clean aluminum welding.

Relevance of PLOs

PLOs as presented are relevant for industry.
Approve the proposed PLOs, Reaffirm existing PLOs.

Some comments:

- Prior relevant experience is important
- Including welding is a plus but not required
- AutoCAD, drafting, and fabrication not required
- The course topics are all relevant and necessary
- This degree would be beneficial for someone applying for our higher paying operator positions where mechanical aptitude is required
- welding courses are a “nice to have” option
- Achieving the degree shows the ability of the employee to start and finish a rigorous program
- For the IMAC degree to be specifically beneficial for promotion into a supervisor role, it would need to include leadership-type topics such as:
    - Leadership skills
    - Business 101 information such as basic accounting
    - Critical thinking skills
    - Decision-making skills
    - Teambuilding skills

- I completely understand and support combining with welding, just doesn't make much difference for what we are looking for in our technicians. I know there are a lot of jobs/industries where the combination makes a lot ofsense

Priority of PLOs

- #1 Demonstrate proper safety procedures when performing minor troubleshooting repairs
- #2 Employ appropriate diagnostic tools to troubleshoot, repair, and/or maintain production systems
- #3 Student will be able to correctly demonstrate and perform periodic maintenance procedures
- #4 Devise maintenance routines for mechanical, hydraulic, and pneumatic systems
- #6 Student will be able to troubleshoot system for errors or malfunctions
- #6 Student will be able to connect motors, electrical connections, and controllers to allow a PLC to properly operate a machine
- #7 Student will be able to calculate total system amperage, voltage, and wattage
- #8 Setup and operate basic welds using OAW, SMAW, GMAW, FCAW, GTAW, and clean aluminum welding

Does Sequence Exist for PLOs

- #1 Demonstrate proper safety procedures when performing minor troubleshooting repairs
- #2 Student will be able to correctly demonstrate and perform periodic maintenance procedures
- #3 Employ appropriate diagnostic tools to troubleshoot, repair, and/or maintain production systems
- #6 Student will be able to calculate total system amperage, voltage, and wattage
- #6 Student will be able to connect motors, electrical connections, and controllers to allow a PLC to properly operate a machine
- #6 Student will be able to troubleshoot system for errors or malfunctions
- #7 Devise maintenance routines for mechanical, hydraulic, and pneumatic systems
- #8 Setup and operate basic welds using OAW, SMAW, GMAW, FCAW, GTAW, and clean aluminum welding

III. Program Needs

We do a needs assessment for our Perkins grant every year and will continue to watch student placement (where are our graduates working and at what professional level), and our academic skill attainment & student retention and transfer rates. Other items to keep an eye on are, the number of males in non-traditional programs as well as females in welding and IMAC programs. Retention and completion for English language learners and enrollment of Hispanics and first generation college students. We have recognized some needs to expand our programs of studies to our remote areas as Harney County does not get as much hands on experience as Ontario High School students because of their location.

We have a Foundation Grant that offers $7,500 each term to help students with their out of pocket expenses. We will be working on a list of needs for our qualifying students

a. Qualified Personnel

   What we are looking for in a qualified instructor/adjunct is professional experience (5 years in the field), ability to connect with students, have the personality to work with people, certifications/qualifications (AWS), being a certified welding inspector is a plus, and if you have a degree that would be great, however we will also consider years of experience.

   i. Welding Faculty= Please keep us in mind and send us anyone you feel would fit our need.
   ii. Caldwell Welding=We have a fantastic facility in Caldwell at Elevate Academy and are in need of good qualified instructors.
   iii. IMAC Adjunct=Same as above, keep us in mind as we look for instructors.

b. Facilities Updates

   Brand new facility with two terms of welding classes and 1 term for everyone else, if you are interested in a tour please reach out to us and we will get that set up.

c. Equipment Priorities

   i. Track Torch=Purchased
   ii. Mixed Gas/GMAW with quick connect lines to booths
   iii. Electrical drops to portables (qty 6) This item is priority one
   iv. 12” Brake for Iron Worker
   v. Stools
   vi. Other Item suggested was a Magnetic Particle tool

   vii. IMAC: Desktop CNC Mills, Tabletop Robots, Multimeter (purchased), Robotics, PLC, Fluid Power, and Electrical Training systems

   There was a question about what brand of PLC’s are used, David stated that the Allen Bradly brand is what is used. Justin was unable to attend this meeting and he will follow up with further information about the PLC’s when he gets a chance.

IV. Status of COVID-19 Pandemic Response

David reported that It sounds like the state of Oregon is easing up a bit on the COVID restrictions, it is very likely that we will see normal operations in the fall.

V. IMAC Program Review June 23,24

a. EMSI Alumni Outcomes Data

This new software has been purchased and we will soon be able to report outcomes on our past students and see where they are currently employed and will also help us recruit new members for the advisory committee.

b. Embedded Industry Certifications

We currently have 8 embedded certifications.

VI. Meeting Next Fall: Mid-Late October

VII. Roundtable / Adjourn

Sandy Porter=Instructors are hard to find, please pass information along to better assist us in our search for quality instructors.

Dave=The new equipment was installed last year, and everything is up and running at this time.

Luke Folke=We have had a great year and the students are enjoying the new building and the new equipment. Thank you for all of your support. It is a great feeling to send our students out on the right foot.