Instructional Units Program Review Year Five Update - Welding Technology Department Latest Version

This cycle is for Instructional Units to complete the Year Five Update of the Program Review Cycle.

Instructional Units Program Review Year Five Update

1. Program Update : Version by **Meyer, Joseph** on **10/29/2021 20:50**

1a. Provide any important changes or updates within your program since your Program Review Year Three Update (2019-20). (New degrees, new curriculum, staffing changes, etc.)

Since the last program review, no changes have occurred to our degrees, certificates or staffing. As far as curriculum, the transition from in-person to online courses for our theory classes took place due to Covid. After being taught online for over year now, both students and Instructors look forward to bringing them back to in-person for Spring 2022.

For our theory courses (Weld 10, 35 & 40) we have consolidated our textbooks from a quantity of 4 to 3. This will save the student about $100 and increase the ZTC for our program.

During the summer of 2021, we taught our new course Weld-007 Metal Fabrication Technologies and it went very well. The students learned how to use various hand tools and power tools, layout of parts for fabrication and repair. We look forward to teaching it again this summer.

1b. Please address the following enrollment data provided for your program.

1.b.1. What are the enrollment trends over the past 3 years, beginning with Fall 2018? (Please address census enrollment, census fill rate, and productivity (FTES/FTEF)

From the Tableau data provided to me, it shows we had a census enrollment of 255 students in Fall of 2018, to 268 in 2019 fall, 163 for fall of 2020, ending with 157 for Fall of 2021. Covid-19 really derailed everything for our student enrollment. Spring of 2020 our labs were canceled as well as Summer 2020 since we could not teach in-person due to county/state rules. For Fall 2020 into Spring 21, we offered our labs in-person but were limited to 11 students per lab. This restriction caused major aggravation for students as we shut the door to new students so we could provide enough openings to get the existing/advanced students out. Now, we have reopened for new students and it will take some time to get the word out that we are open. Unfortunately, many in the public think we are still shutdown.

The census fill rate decreased from 18.8% in Fall of 2018 to 11.5% for Fall of 2021. These rates are not factual as the multi-section labs we teach obscures the data. For example, in Fall of 2020, the data shows a fill rate of 12% when in reality, it is many times higher. We had double the amount of students allowed in lab since management never alerted us to the Covid student maximum of 11 per class until several days after classes started. To keep things legal, we had to split-up the students and have them come in once per week instead of the usual twice. The 11 student max was not reflected in Insite or Tableau data. This fact should put the fill rate over 100%.
For Spring of 2021, Tableau shows a fill rate of just 9% but most of our labs were full since we were once again restricted to enrollment of 11 students per lab. Once again, the data is grossly incorrect.

Productivity has decreased from 16.3 in Fall of 2018 to 10.3 in Fall of 2021.

1b. Please address the following enrollment data provided for your program.

1.b.2. What does the data suggest in terms of future needs/directions?

For Fall of 2018 we had enrollment of 255. For Fall of 2021 it is 157. Prior to Covid, we had a much higher enrollment. The enrollment fluctuates up and down over time as well as our productivity. Covid protocol here at LMC limited us to 11 students in lab for a year. Now, as that has passed we hope to see an upward trend. Presently, we have courses in the mornings, afternoons, evenings, and Saturdays. We believe that many potential students are still staying home due to Covid and are simply not aware we are open for in-person labs. Since our theory courses are still presently online, I believe many people falsely believe that the college itself is not open. In Fall of 2021, we surveyed our students regarding the online theory courses, and the vast majority want them back in-person.

Starting in Spring of 2022, we plan to be back in-person for all classes and hope to see enrollment grow back to normal. There is still a strong demand in industry for welders and once students learn that, they will want to become one.

Overall, for the program and college, I would like to see the district do major advertising on TV and online this winter to let the public know we are open and looking forward to new enrollments.

1c. Provide a brief update on the timeline for your program's goals as listed in your Program Review Year Three Update (2019-2020). If your program's goals are in progress or modified, please include action steps and responsible parties in your explanation.

Goals	Completed/ Abandoned/ In Progress/ Modified	Impact/ Explain/ Action Steps	Timeline/ Responsible Parties
Goal 1: Start a new course: Metal Fabrication Technologies, WELD-007	Completed.	Course was first taught in Summer 2021 as labs were cancelled in Summer 2020 due to Covid. Enrollment was limited to 11 students. The course went well and students enjoyed building projects and learning new skills. We look forward to teaching it again next summer.	Joe Meyer

Goal 2: Continue to Offer and Build the Best Welding Program in the Bay Area.	Always In Progress	We are continuously improving our program in both our theory and lab offerings. We strive to use the latest equipment technology and techniques to improve student learning. Our lab has seen many upgrades from lighting & electrical, to storage of metal for student use. We maintain backup tooling for many of our processes to avoid any downtimes and our industry partners have been generous in material donations. Every summer, Dann teaches Weld-100 where high school students get to try out welding for a week. It has become a great promotional & recruiting course for our program.	On-going. Joe Meyer Dann Gesink
Goal 3: Find more internship opportunities for our students who want summer employment.	**In Progress**	This has been going well as demand is so high in industry for any workers that many companies have now sufficed for part-time workers where as in the past they would only hire full-time. We have been able to place many of our students desiring employment in part-time positions thus helping employer's demands while allowing the student to complete their LMC education. Starting in 2019, we have been placing students into yearly internships with the Central Contra Costa Sanitary District where they have done many industrial trades work from cleaning, maintaining, welding, fabrication, and repair in an industrial plant.	On-going. Joe Meyer, Dann Gesink.

FOR CTE PROGRAMS ONLY

1c. Community and Labor Market Needs (Link Ed Code 78016 (http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=EDC&sectionNum=78016.), Title 5, 51022 (https://govt.westlaw.com/calregs/Document/I69DDBCC0B6CB11DFB199EEE3FF08959C?viewType=FullText&listSource=Search&originationContext=Search+Result&transitionType=SearchItem&contextData=(sc.Search)&navigationPath=Search%2fv1%2fresults%2fnavigation%2fi0ad7140b0000016c911a16d7fb7f969b%3fNav%3dREGULATION_PUBLICVIEW%26fragmentIdentifier%3dI69DDBCC0B6CB11DFB199EEE3FF08959C%26startInde

There is a huge demand for workers who know how to weld. Every union I know of has apprenticeship openings, every fabrication shop I communicate with is overwhelmed with work. Almost every day an employer calls me desiring our students. There is still a backlog of major projects in the Bay Area that involves welding. The demand I see today for skilled welders is still very high!

Now, to refer to the EMSI Quarter 3 2021 data set provided to me by Bill Bankhead, there are three soc codes that were provided (which by the way only accounts for a small portion of the occupations that our students enter), it shows job details for Reinforcing iron workers and welders/cutters and soldering jobs. Keep in mind that maybe 25% of our students fall into these two categories. Nothing is given about structural iron welders, sheetmetal workers, pipefitters, pipe welders, steamfitters, boilermakers, and many other CIP categories that 75% of our students enter.

EMSI data illustrates only an 8% upward change in jobs in our region showing a total of 2,812. (I believe that this number is significantly higher based off of my communication with industry.)
It shows the median hourly average earnings of $26.35 per hour ($3 per hour higher than two years ago). (From my communication with industry, I believe this number is closer to $5 per hour increase in just the past two years since industry is having difficulty finding workers.)

The CTEOS data charts provided by the program review committee is not specific to the Welding program, however, it illustrates that completing a CTE course of study will lead to a "positive employment outcome". Gosh, what a surprise!

FOR CTE PROGRAMS ONLY

1d. Advisory Board Update and Analysis (CTE related only) Include dates of Advisory Board meetings in 2020-2021, and those completed or planned in 2021-2022.

The purpose of our Advisory Board is to receive recommendations an advice in regards to the improvements and changes to be made in the Welding program. We discuss updates to our program, equipment and material needs, changes in the job market, and different trends in our industry. To maintain our high level of quality training, the board helps us to stay connected to what is happening in the field and continue to meet industry needs.

Our Advisory Board is made up of a LMC Welding Technology Department lead, faculty, an active student from our program, an alumni graduate of our program, as well as a variety of industry partners with different expertise. Partners include local weld shop owners, manufacturing company owners/management, both working & retired QC inspectors, manufacturing production engineer, and a welding technician.

Date of our last meeting was January 22, 2020 and the minutes were sent to the Dean and a hard copy was given to Shondra West.
Another small meeting was held on April 17, 2021 with two board members from Moose Metal. We discussed the latest with the program and their hiring of one of our students.

The next meeting is planned for December 2021.

Goals and Objectives			**Modified**	**In Progress**	**Abandoned**	**Completed**
Goal 1. Strengthen a culture of equity, diversity, inclusion, and racial justice. (District #2 and #4)						
Goal 2. Increase and maximize equitable opportunities for students to successfully complete courses and programs. (District #1 and #2)						
Recommended Actions	Start a new course: Metal Fabrication Technologies, Weld-007. Course was active in 2020 but got cancelled due to covid. It was run in summer 2021 with great success. Joe Meyer is in charge of this action. The outcome is to help teach students skills they need outside of welding. This course will also increase program enrollment, student success rate, and completions.	0 linked SLOs 0 resource requests				
Goal 3. Increase opportunities that will prepare students to enter high-demand and living-wage occupational fields. (District #3)						

Goals and Objectives			Modified	In Progress	Abandoned	Completed
Recommended Actions	Find more internship opportunities for our students who want summer or part-time employment. This is an ongoing task. We have a few opportunities for our top students who will continue their LMC education while working in the industry. More employer opportunities are always welcomed and highly sought after. Responsible party would be Joe Meyer - Dept. head of the Welding Technology dept. The outcome would be: real world work experience for the students who will then hopefully have better success & completion rates.	0 linked SLOs 0 resource requests				
Goal 4. To better support students in accomplishing their academic and career goals – from entry to completion/transition – and to enhance course-level and program-level achievement, expand and deepen educational, workforce, and community partnerships. (District #3)						
Recommended Actions	Continue to offer and build the best welding program in the Bay Area. We are continuously improving our program in both our theory and lab offerings. We strive to use the latest equipment technology and techniques to improve student learning. Our lab has seen many upgrades from lighting & electrical, to storage of metal for student use. We maintain backup tooling for many of our processes to avoid any downtimes and our industry partners have been generous in material donations. Responsible party for this action is Joe Meyer and Dann Gesink, The outcome would align with the above LMC Goal 4.	0 linked SLOs 0 resource requests				
Goal 5: Effectively utilize institutional resources to meet the needs critical to the College mission. (District #4 and #5)						

2. Vision for Success Goals Update : Version by **Meyer, Joseph** on **11/29/2021 21:16**

2a. The following table lists the *Vision for Success* indicators that we must align to as a College and as a District. Please look at your program data (Tableau) for each of the following *Vision for Success* indicators. Please address all indicators that are relevant to your program and provide a status update on your program goals from your Program Review Year Three Update. Please include action steps if your goal(s) has been modified and an explanation if your goal(s) has been abandoned. *

NOTE - Please copy and paste the table below in your response and complete accordingly.

Vision for Success Indicators and ACCJC Indicator	Program Set Goals (from PR Year 3 Update)	Status (Indicate Modified, Completed, or Abandoned)	Timeline	Responsible Parties	Action Steps/ Explanation
Course Success					
Degrees (AA, AS, ADT)					
Certificates of Achievement					
Unit Reduction					
CTE Jobs					

Vision for Success Indicators and ACCJC Indicator	Program Set Goals (from PR Year 3 Update)	Status (Indicate Modified, Completed, or Abandoned)	Timeline	Responsible Parties	Action Steps/ Explanation
Course Success	Our success rate from 2016-2021 is 64.8% overall the goal was 58.4%.	Completed from PR year 3 goals.	2022	Joe Meyer Dann Gesink	It appears we met and exceeded our goal.
Degrees (AA, AS, ADT)	Our grand total from 2016 - 2021 is 25 degrees. The goal was 2.	Completed from PR year 3 goals.	2022	Joe Meyer Dann Gesink	We have met and exceeded our goal but we strive to get more.
Certificates of Achievement	Our grand total from 2016 - 2021 is 13. The goal was 3.6	Completed from PR year 3 goals.	2022	Joe Meyer Dann Gesink	We have met and exceeded our goal but we strive to get more.

Unit Reduction	For our AS degrees grand total from 2016 - 2021 avg. the data shows units earned was 84. Goal is stated as 79. Goal was met for C of A and Pre-Apprenticeship Skills Certificates.	N/A - as this was not part of my PR year 3 work.	2022	Joe Meyer	We have met the goal 4 out of 5 years except in year 19-20 which the data shows had a large spike of 122 units average which skewed our results. It would be great to see how this data is calculated as I have my doubts regarding its accuracy. Knowing my students, they are not taking 122+ units of courses here at LMC.
CTE Jobs	Year 3 PR data showed an 11% estimated increase in jobs to 2383 in year 2024. Present EMSI data (2021 Q3) shows 2634 actual jobs which exceeds the projections from just two years ago.	N/A		Joe Meyer	As stated previously, there is a huge demand for welders in the Bay Area and beyond. The data shows it and I can prove it with my industry contacts.

2b. The *Vision for Success Goal 5 - Equity* is designed to reduce the equity achievement gap on course seuccess for disproportionately impacted (DI) student populations. The College has identified the following three disproportionately impacted (DI) populations: African-American, economically disadvantage students (low income), and foster youth students.
Please review your program data (Tableau) for each of the aforementioned DI populations, and provide a status update on your program goal(s) for your previously selected DI population(s) in your Program Review Year Three Update. If your goal(s) has been modified please include action steps and if your goal(s) has been abandoned please provide an explanation.*

NOTE - Please copy and paste the table below in your response and complete accordingly.

Course Success by DI Population	Program Set Goals (PR Year 3 Update)	Status (Indicate Modified, Completed or Abandoned)	Timeline	Responsible Parties	Action Steps/ Explanation
African American					
Low Income					
Foster Youth					

Course Success by DI Population	Program Set Goals (PR Year 3 Update)	Status (Indicate Modified, Completed or Abandoned)	Timeline	Responsible Parties	Action Steps/ Explanation
African American	2017 goal was 38.5% which we have not met as our grand total success rate was 37.8%.	N/A	2022	Joe Meyer	Data shown for information only. No goal was set in year 3 PR as we only had to discuss one of the DI population. However, the program was only off by 0.7%.
Low Income	The 2017 goal was 56.2% success rate, our grand total rate was 61.2%.	Completed	2022	Joe Meyer	We implemented a textbook reduction for our program from 4 books to 3. We believed this would help the students and in a small way increase the ZTC for our program.
Foster Youth	The 2017 goal was 62.4% while the grand total for our program is 58.1%	N/A	2022	Joe Meyer	Data shown for information only. No goal was set in year 3 PR as we only had to discuss one of the DI population. Lastly, I don't know how I could affect this population as I have no way of knowing if someone is a foster youth or not. It would probably break some FERPA laws to ask.

3. Assessment Status Update and CSLO Assessment Effectiveness : Version by **Meyer, Joseph** on **09/27/2021 21:18**

a. Please review the data provided on the assessment status of courses in your discipline for Cycle Two (2017/18-2020/21). For any courses that were not assessed in Cycle Two please list them in the table below in your response including why they were not assessed, when you are going to assess them, and who is going to assess them.*

NOTE - Please copy and paste the table below in your response and complete accordingly (add extra rows if needed).

Course Name/ Number	Reason course was not assessed	When course will be assessed	Faculty Responsible for Course Assessment

Course Name/ Number	Reason course was not assessed	When course will be assessed	Faculty Responsible for Course Assessment
Weld-100	In-progress	Sept. 2021	Dann Gesink
All other courses are up-to-date.			

b. Discuss the results of any CSLO assessments performed this year. What changes, if any, are planned to improve student success (ex. pedagogy, assessment instruments are not appropriate to measure, CSLO rewritten etc.)?
From the assessments done in 2021, a few changes may be implemented. In our theory courses we plan to show more YouTube videos as we have found that students respond better to videos than our lectures. In addition, we plan to quiz students often to encourage them to keep up with their studies.

4. Course Outline of Record Updates : Version by **Meyer, Joseph** on **09/27/2021 21:18**

Please review the data provided in eLumen for the status of the Course Outline of Records (COORs) in your discipline. Please indicate in the table below any COOR(s) for your discipline that has not been updated and identify the faculty member responsible for submitting the updated COOROs) to the Curriculum Committee by November 1, 2021.*

NOTE - Copy and paste the table below in your response and complete accordingly (add extra rows if necessary).

Course *(Enter Course Name ex. ENGL-100)*	Faculty Responsible for COOR Update

Course ***(Enter Course Name ex. ENGL-100)***	**Faculty Responsible for COOR Update**
WELD-100	Dann Gesink and a few others. This is a multi-course coor involving Welding, Auto, Ptec, Etec.

Impact of Resource Allocation