Course Assessment- Part B: Your Results & Analysis

COMPLETE #685

Please select your course and name from the drop-down menu. If your course or name are incorrect or missing, contact Sara Wade, the Instructional Services Administrative Assistant, 541-506-6037 or swade@cgcc.edu.

MFG 280- Aluminum GTAW/TIG Welding- Robert Wells-Clark- Part B- Winter 2025

*** Part B: Your Results DIRECTIONS 1. Report the outcome achievement data gathered via the assignments, tests, etc. you identified for each outcome (question 3) of your Part A. (Only include data for students who completed the course. Do not include students who withdrew or earned an incomplete) Data for all 3 outcomes should be reported below.**

Students all showed significant growth in aluminum welding over the course of the term. This is demonstrated by pre and post assessment data; as well as their ability to pass functional testing as part of the process.

*** Outcome #1**

Students pre test data had an average of 33% on this assessment; their final assessments had a class wide curve grade of 84%.

*** % of students who successfully achieved the outcome (C or above)**

90

*** Outcome #2**

All students were able to successfully manufacture these joints to appropriate specification and pass destructive testing analysis.

*** % of students who successfully achieved the outcome (C or above)**

100

*** Outcome #3**

19/20 students successfully fabricated a 120psi pressure vessel with zero leaks or catastrophic failures by EoT.

*** % of students who successfully achieved the outcome (C or above)**

95

*** ANALYSIS 3. What contributed to student success and/or lack of success?**

Attendance in CTE and experiential learning courses is always the most critical factor as much of the skill building work cannot be taken home. Assessed Outcome #1 was chose as it was purely academic in nature, and provided a litmus test for work that is done outside of the lab and outside of the skill building being done.

*** 4. Helping students to realistically self-assess and reflect on their understanding and progress encourages students to take responsibility for their own learning. Please compare your students' perception of their end-of-term understanding/mastery of the three outcomes (found in student evaluations) to your assessment (above) of student achievement of the three outcomes.**

Because these are hard skills, students received physical sample feedback. Outcome 1 understandings helped them succeed in 2 and 3; particularly in the refinement of skills for success in outcome 3.

*** 5. Did student achievement of outcomes meet your expectations for successfully teaching to each outcome (question 4 from Part A)**

Yes.

*** 6. Based on your analysis in the questions above, what course adjustments are warranted (curricular, pedagogical, student instruction, etc.)?**

Additional safety protocols for when classes are unintentionally over enrolled, as MFG classes have been this year.

7. What resources would be required to implement your recommended course adjustments (materials, training, equipment, etc.)? What Budget implications result?

Addtional M+S budget, additional venitilation infrastructure. There are large budget implication fo rthese.

*** 8. Describe the results of any adjustments you made from the last assessment of this course (if applicable) and their effectiveness in student achievement of outcomes.**

I did not have data on my last assessment of this course, unfortunately. I will try to save this information for better future use.

9. Describe how you explain information about course outcomes and their relevance to your students.

Firstly through academic learning from texts and other media, secondly through demonstrations and examples, and finally through rubric and real destructive testing feedback.

10. Please describe any changes/additions to instruction, curriculum or assessment that you made to support students in better achieving the CGCC Institutional Learning Outcomes: ILO #1: Communication. The areas that faculty are focusing on are: "Content Development"and/or Control of Syntax and Mechanics" and ILO #2: Critical Thinking/Problem Solving. The areas that faculty are focusing on are: "Evidence" (Critical Thinking) and/or "Identify Strategies" (Problem Solving). ILO #4: Cultural Awareness. The area that faculty is focusing on is: "Openness" (Encouraging our students to "Initiate and develop interactions with culturally different others") ILO #5: Community and Environmental Responsibility. ILO#3 - Quantitative Literacy - "Application/Analysis" and/or "Assumptions"

#1: We are well aligned in this area as we have the ability to teach both visual, tactile and verbal communication; many classes are not able to due to the nature of their instructional methods and content.
#2: This is inbound with any CTE course and is part of our program outcomes. Both evidence and identifying strategies must be utilized by our students to find success; if they are able to pass these outcomes they have demonstrated these at a high level over the course of their learning journey.
#4: This is an area where we are weakest; the outcomes chosen for this assessment do not fit well here. Broadly, discussions about underrepresented populations in the workplace occur, but direct instruction in this area is primarily done in MFG 195, 150, 151, 152.
#5: Our program is designed to curtail carbon emissions explicitly through teaching lean manufacturing principles and advanced strategies to reduce raw material usage, supply chain length and fabrication timeline.
#3: Inbound with ILO#2, part of the critical thinking process must be analysis and application of solutions and weighing their effectiveness. These are based on assumptions made from available evidence in the manufacturing environment.