# Course Assessment - Part A: Your Plan

COMPLETE

#547

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

MFG 150- Manufacturing- Robert Clark- Fall 2021

\* Part A: Your Plan DIRECTIONS 1. Choose three of your course outcomes to assess and report on this term (these will also be used in your Student Course Evaluation survey): Outcome #1

Perform SMAW position 3 G and F welds to an apprentice level of welding

\* Outcome #2

Identify and diagnose common weld errors and their corrections

\* Outcome #3

Identify and precisely use commonly used manufacturing tooling

Have you completed an assessment for this course prior to this term?

No

If yes, are you assessing different outcomes?

Yes

#### Comments:

I do no believe this course has been previously assessed, but I am unsure.

2. To which degree(s) or certificate(s) does your course map? Degree, Certificate, & Program Outcomes

Manufacturing Certificate

\* Method of Assessment 3. What methods will be used to assess individual student understanding of each of these outcomes? (Please be specific.) Outcome #1: Method to assess student understanding

For this outcome we use the same testing procedure as the AWS, a coupon bend test. The rigor of the assessment is slightly decreased as the outcome states "apprentice" level of welding. This assessment is a hands-on skill based assessment where students weld together to plates, process them, and they are then bent in to a U shape to check for weld errors.

### \* Outcome #2: Method to assess student understanding

This is an assessment in three parts, one written, one evaluative and one hands on. Firstly, students assess sample welds and give written feedback using technical terms they have learned on what happened and how to fix the errors in the sample. This requires a great amount of attention to detail. The second evaluative phase of assessment is having students keep a journal for two weeks of welding classes in order to determine their own welding errors and how they will fix them. They track this progress weld by weld to see areas of weakness and growth. The third portion of the assessment has students preparing and testing coupons to identify if the weld errors on their visual inspection came to fruition through the destructive testing processes used.

#### \* Outcome #3: Method to assess student understanding

Students will use the tooling in a hands on assessment to build example products from blueprints provided. These assessments will be checked against a tolerance and for accuracy in following the symbols, directions and processes outlined in the blueprints. Attention to detail, again, is cruicial for student success as well as problem solving and critical thinking through identifying the correct steps that need to be taken and in what order processes must happen.

#### \* 4. How will you know if you were successful in your efforts to teach this outcome? Outcome #1:

Students will produce a weld sample with 1/16" or less of error in the inclusion.

# \* Outcome #2: How will you know if you were successful in your efforts to teach this outcome?

Student journals will track improvement and self diagnosis of welding errors. Written assessments will use correct technical terminology and language, while providing solutions based criticism. Destructive testing should reaffirm student diagnosis or inform future assessment of weld quality prior to DT taking place.

# \* Outcome #3: How will you know if you were successful in your efforts to teach this outcome?

Products will successful be produced within the correct tolerance and within an acceptable timeframe for manufactured goods. Students will exhibit critical thinking in their approach to building products that will result in improvements in finished product.

# 5. Instructor Questions: Create two course specific questions to be included on the Student Course Evaluation. Question #1

What area do you feel you improved in the most in this course?

#### Question #2

What area in this course do you feel needs additional emphasis or instructional time spent on?

Do you require the names of students who complete the course evaluation survey? (Please note: names will be sent to instructors the Thursday before term ends)

NO

Reminder, when completing Part B, instructors will be asked the following questions: Describe anything you did to assist the institutional effort to support students in improving achievement of the specified criteria for the following Institutional Learning Outcomes (ILO): 1. ILO#1 - Communication - "Content Development" and/or "Control of Syntax and Mechanics" 2. ILO#2 - Critical Thinking/Problem Solving - "Student Position" and/or "Evaluate Potential Solutions" 3. ILO#4 - Cultural Awareness - "Curiosity" (Encouraging our students to "Ask deeper questions about other cultures and seek out answers to these questions") 4. ILO#5 - Community and Environmental Responsibility - "Understanding Global Systems" and/or "Applying Knowledge to Contemporary Global Contexts" 5. ILO#3 - Quantitative Literacy - "Application/Analysis" and/or "Assumptions"

Ok