



## Course Assessment - Part B: Your Results & Analysis

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Please select your course and name from the drop-down menu.

MFG221-Production Manufacturing 2-Chris Dodson-Part B-Winter 2026

### 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.

#### Outcome Achievement Data

Overall 71% of all students completed and met all course outcomes with a 60% or better demonstration of course outcomes.

2. Report the percentage of students who successfully achieved the outcome at a C or above. (Outcome #1, #2, #3 can be copied/pasted from question 1 of Part A)

#### Outcome #1:

For Outcome 1, Understand CNC Operation and Programming, 60% of students demonstrated consistent knowledge and understanding of Operation and Programming concepts with full understanding and application of techniques. Additional 10% showed Operational understanding, but received lower than average marks in Programming, while another 10% showed low marks in Operational understanding while achieving goals in Programming.

Overall, 70% successfully achieved at a C or above.

**Percentage (%) of students who successfully achieved the outcome (C or above)** 70%

#### Outcome #2

For outcome 2, Demonstrate knowledge of feed speed and circular interpolation, the data was nearly identical reflected by the same students.

**Percentage (%) of students who successfully achieved the outcome (C or above)** 70%

#### Outcome #3

For outcome #3, Produce product from existing 3d solid model and tolerance, all students were able to accomplish this outcome with a 70% or better

**Percentage (%) of students who successfully achieved the outcome (C or above)** 100%

## Analysis

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

Students who achieved all outcomes with high marks consistently used lecture items, notes, and reference materials while in lab. Students who received lower marks frequently attended lectures late, were rushed, or did not read reference materials prior to application in the lab.

### 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.

From the SCE, it appears that students who put into practice the work done outside of class showed the most gains.

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

Yes, this particular group of students had a range of interest and effort to learn the content. Students with interest showed largest gains in understanding, and most fruitful outcomes.

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

With each group there are trade offs with project based lesson plans. Unfortunately, the cost of raw material, tooling, etc prohibits many "standardized" lesson plans. This makes it difficult up apply a "yard stick" to a course year over year.

Ultimately, having standard projects that allow these skills to be refined faster or with repetition would allow larger amounts of student understanding.

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

A material and supply budget that reflects student lab fees would ultimately aid in resolving much of the issues. There also seems to be a growing number of students who do not have proper computer resources available outside of the classroom.

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: Intercultural Knowledge and Competence. 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 - "Assumptions"