

College Now: Course Assessment

Part B: Your Results & Analysis

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

MTH251 - Calculus I - Kevin Liddiard- Fall 2023

Did you have a mentor for this course?

No

Part B: Your Results

1. Outcome Achievement Data

Of my 10 students- 80% completed a class presentation on a topic related to limits: " The Area Problem", "The Tangent Problem", "Velocity" and " The Limit of a Sequence."

7 of 10 or 70 % scored greater than 75% on the the average vs instantaneous velocity assignment.

8 of 10 scored greater than 75% on the error propagation assignment.

100% of the students successfully presented an example of applications of rates of change in the sciences.

Finally, 90% scored 80% or higher on the related rates project.

2. Report the percentage of students who successfully achieved the outcome at a C or above. Outcome #1 and #2 can be copied and pasted from your Step 2: Course Approval/Rewal form.

Outcome #1:

Recognize applications in which the concept of limits and derivatives can aid in overall understanding.

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

90%

Outcome #2:

Construct appropriate models using limits and derivatives.

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

90%

ANALYSIS

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

For success- class size.

With such a small class- most students worked collaboratively and had close ties to their classmates. They collectively enriched their comprehension of the material at hand.

For lack of success- attendance was a huge factor.

One student was injured in a fall sport and missed quite a few days of school. It was difficult for them to catch up on all the work and their mastery of the material suffered.

4. Did student achievement of outcomes meet your expectations for successfully teaching to each outcome?

Yes- they did.

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

Perhaps I need to provide a bit more rigor to some of the assignments- adding challenge questions in the daily assignments for those who master the basics. Also- I could broaden the scope of the related rates project. The current assignment has students collecting their own data for the same related rates equation. I could instead offer them a variety of equations to use in modeling.

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

I talk about the long vs short term take-aways. Yes, one needs to learn certain skills and rules for calculus and the ensuing assessments in the short term- over weeks and months. But one also needs to have an enduring understanding (phrased in the course outcomes) that will last for years and decades. One needs to master material for the work in a class but one should also be able to explain the "big ideas" to parents at a dinner table or friends at a cocktail party in broad terms that anyone, even non-math people, can appreciate.

7. What support (mentoring, administrative support, etc.) would be required from CGCC to implement those changes?

None.