2014-2015 Assessment Cycle

Assessment Findings

Assessment Measure Result per Assessment Measure

Mathematics 16A Outcome Set

Student Learning Outcome

Outcome 1: Derivatives/Antiderivatives

Compute derivatives of many functions and antiderivatives of simple functions.

Assessment Measure: Computation of Derivatives and Antiderivatives
Course level; Direct - Exam

Details/description of the assessment measure/method: 2 questions were distributed to the one section of Math 16A offered in the fall '14 semester. The questions were not included in any exams, but were conducted in a "pop-quiz" style.

Describe the standards for successful performance on this SLO: Students earning 70% or more in partial credit, for each question separately, were considered to have successfully performed on the SLO.

What percentage of students should successfully meet the standards for this SLO?: We expect 70% of the students participating to successfully meet the standard.

When do you plan to assess this outcome? (indicate the semester and year): Fall 2014

Supporting Attachments:

Math 16A SLO #1 Questions and Rubric (Word Document (Open XML))

Assessment Measure Results for Computation of Derivatives and Antiderivatives

Summary of Assessment Measure Results: The two problems were presented to the one section of Math 16A in the fall semester as a "pop quiz". 34 students were assessed, with 23 students earning 70% or more credit on both questions. (28 earned at least 70% on problem 1 while 25 earned at least 70% on problem 2).

Results: Target performance: Not Met

What percentage of students successfully met the standards for this SLO?: 23/34 = 68%

Was the assessment information sampled in any way? If so, please describe.: All the students still enrolled at the end of the semester were assessed.

Overall Recommendations

While the target of 70% performance on both questions individually was not met, the fact that 68% of the class achieved satisfactory results, combined with the facts that 82% of the class "passed" problem 1 and 73% of the class "passed" problem 2, separately, the performance of the class, for all practical purposes, met the target performance.

Overall Reflection

The topic of antiderivatives comes very late in the semester for Math 16A, so students cannot be expected to have the same level of comfort as they have with differentiation. Perhaps the function used for the antidifferentiation assessment should be simpler than that used for differentiation.

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