Expected Outcomes: Mathematical Terminologies

Students will be able to understand the basic terminologies in mathematics.

Related typical general education outcomes:
1. Information Literacy
2. Analytical and Critical Reading
3. Ability to Critique Arguments

Assessment methods

Method: Survey of Faculty

Faculty members were surveyed about student performances in select upper-level courses required in specialty areas. This year's input was supplied by instructors of MATH 3100 (Advanced Mathematics), MATH 5200 (Analysis), MATH 5310 (Abstract Algebra I), and MATH 5500 (Topology). Our target rate is 70% or above.

Findings:

According to the survey collected about 84% (weighted average) of students met the goal of understanding the basic terminologies in Mathematics.

How did you use findings for improvement?

Although we met the goal but we will continue improving in this area. In fact, it has already improved from 78% reported last year to 84% this year.

Additional comments:

The input in MATH 5310 (Abstract Algebra I) could not be obtained due to unfortunate passing away of the instructor.

Expected Outcomes: Problem Solving

Students will know how to solve mathematical problems

Related typical general education outcomes:
2. Analytical and Critical Reading
4. Ability to Construct Arguments
5. Ability to Use Mathematical Methods

Assessment methods

Method: Survey of Faculty

Faculty members were surveyed about student performances in select upper-level courses required in specialty areas. This year’s input was supplied by instructors of MATH 3100 (Advanced
Mathematics, Bachelor’s,  2012  SM

Findings:

According to the survey collected about 74% (weighted average) of students displayed the ability to solve mathematical problems.

How did you use findings for improvement?

Although we met the goal but we will continue improving in this area. In fact, it has already improved from 66% reported last year to 74% this year.

Additional comments:

The input in MATH 5310 (Abstract Algebra I) could not be obtained due to unfortunate passing away of the instructor.

Expected Outcomes : Mathematical Presentation (written)

Students will know how to make logical (written) presentation of their solutions to mathematical problems

Related typical general education outcomes:

4 Ability to Construct Arguments
5 Ability to Use Mathematical Methods
7 Written Communication

Assessment methods

Method : Survey of Faculty

Faculty members were surveyed about student performances in select upper-level courses required in specialty areas. This year’s input was supplied by instructors of MATH 3100 (Advanced Mathematics), MATH 5200 (Analysis), MATH 5310 (Abstract Algebra I), and MATH 5500 (Topology). Our target rate is 60% or above.

Findings:

According to the survey collected about 74% (weighted average) of students met the goal of making satisfactory logical (written) presentation of their solution to mathematical problems. We have made a significant improvement from last year’s 60% rate.

How did you use findings for improvement?

Based on the recommendation made by instructors, the Undergraduate Studies Committee is already considering to change the textbook in one of the courses and to look at the contents of this course so as to make this course more useful.

Additional comments:

The input in MATH 5310 (Abstract Algebra I) could not be obtained due to unfortunate passing away of the instructor.