

Organizational Area	Summary Results	Include data collected in 2019-2020 - Action Plan Summary Results																																																				
Indiana University System AMS » Indiana University: Kokomo » Academic Affairs » School of Sciences Mathematics	<p>Overall Statistics</p> <ul style="list-style-type: none"> • 9% (1/11) outcomes were included • 100% (1/1) of outcomes included have at least one measure specified • 100% (1/1) of outcomes included have measures with findings specified <table border="1" data-bbox="541 487 1543 865"> <thead> <tr> <th colspan="2">3 Total Measures (Includes measures that do not have findings)</th> <th colspan="2">3 Total Measures with Findings</th> </tr> <tr> <th>Measure Type/Method</th> <th>Measure Level</th> <th colspan="2">Acceptable Target Achievement</th> </tr> </thead> <tbody> <tr> <td>Student Artifact</td> <td>0 (0%)</td> <td>Not Met</td> <td>0 (0%)</td> </tr> <tr> <td>Exam</td> <td>3 (100%)</td> <td>Met</td> <td>1 (33%)</td> </tr> <tr> <td>Portfolio</td> <td>0 (0%)</td> <td>Exceeded</td> <td>0 (0%)</td> </tr> <tr> <td>Other</td> <td>0 (0%)</td> <td>Unspecified</td> <td>2 (67%)</td> </tr> <tr> <td>Total Direct</td> <td>3 (100%)</td> <td></td> <td></td> </tr> <tr> <td>Survey</td> <td>0 (0%)</td> <td></td> <td></td> </tr> <tr> <td>Focus Group</td> <td>0 (0%)</td> <td></td> <td></td> </tr> <tr> <td>Interview</td> <td>0 (0%)</td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td>0 (0%)</td> <td></td> <td></td> </tr> <tr> <td>Total Indirect</td> <td>0 (0%)</td> <td></td> <td></td> </tr> <tr> <td>Unspecified</td> <td>0 (0%)</td> <td></td> <td></td> </tr> </tbody> </table>	3 Total Measures (Includes measures that do not have findings)		3 Total Measures with Findings		Measure Type/Method	Measure Level	Acceptable Target Achievement		Student Artifact	0 (0%)	Not Met	0 (0%)	Exam	3 (100%)	Met	1 (33%)	Portfolio	0 (0%)	Exceeded	0 (0%)	Other	0 (0%)	Unspecified	2 (67%)	Total Direct	3 (100%)			Survey	0 (0%)			Focus Group	0 (0%)			Interview	0 (0%)			Other	0 (0%)			Total Indirect	0 (0%)			Unspecified	0 (0%)			<p>0 Total Actions with Status Report</p> <p><i>No Status Reports have been specified</i></p>
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Report : Assessment Cycle Details for : Mathematics

Report Generated by Taskstream

Workspace : Academic Program Assessment and Planning Workspace

Assessment Plan: 2020-2021 Assessment Cycle: Assessment Plan and Assessment Findings

Assessment Plan Template : IU Kokomo Academic Assessment Template

Report Generated : Tuesday, July 20, 2021

Measures and Findings

Mathematics

Outcome

Outcome 2.1 Model applications

Students will be able to translate concepts from other fields into mathematical relationships

Mapped to:

No Mapping

Measure

M215 Final Exams

COURSE LEVEL; DIRECT - EXAM

Details/Description:

This class is typically taken by many School of Sciences majors, including math majors, as well as secondary education majors, and math minors. It was offered in Fall 2019 and Spring 2020 to a total of 56 (69 before withdraws) students, 0 of which were math majors.

Two questions from the final exam (questions #2 and #9) were selected for assessing students' use of correct mathematical vocabulary and notation. Question 2 asked students to complete the definition of limit, and question 9 asked students to complete the limit definition of derivative.

Student responses were determined to be exemplary (E) if the concept was correctly translated from the outside field, acceptable (A) if the concept was mostly translated correctly, revision needed (R) if an attempt was made but there were errors, or not assessable (N).

Acceptable Target:

A student's ability to translate concepts from another field was deemed acceptable if 2 out of 3 problems were correctly translated at the E or A level. At least 75% of students should be able to correctly translate concepts from other fields.

Implementation Plan (timeline):

Key/Responsible Personnel:

Supporting Attachments:

Findings

for M215 Final Exams

Summary of Findings:

Since no mathematics majors completed this course during the 2019-2020 academic year, this item has no assessment data.

Acceptable Target Achievement:

Reflections/Notes:

In light of the completion rate of mathematics majors for this course, the faculty have formed a team to monitor the progress of the majors more closely in order to ensure that these students are able to successfully complete the necessary coursework.

Substantiating Evidence:

Action

in Include data collected in 2019-2020 - Action Plan

Inclusion of external fields

No Status Added to Inclusion of external fields

Action details:

The findings in this report were discussed among math faculty. Since our findings were incomplete, we plan significant changes at this time. We will continue to include a focus on translating problems from other fields in MATH-M216 and to be sure that future assessment artifacts include appropriate items in MATH-M303 and MATH-M215.

Additionally, in order to increase student success in MATH-M215 a group of faculty will be in communication with each other to find resources to offer to mathematics majors so that they can be successful in the introductory Calculus course hence can proceed with their academic program.

Implementation Plan (timeline):

Key/Responsible

Personnel:

Measures:

Supporting Attachments:

Measure

M216 Final Exams

COURSE LEVEL; DIRECT - EXAM

Details/Description:

This class is typically taken by many School of Sciences majors, including math majors, as well as secondary education majors, and math minors. It was offered in Fall 2019 with 5 (6 before withdraws) students enrolled, 1 of which were math majors.

Two questions from the final exam (questions #2 and #14) were selected for assessing students' ability to translate problems from other fields into mathematics. Question 2 asked students to compute the work done by a variable force, and question 14 asked students to find the center of mass of a discrete system.

Student responses were determined to be exemplary (E) if the concept was correctly translated from the outside field, acceptable (A) if the concept was mostly translated correctly, revision needed (R) if an attempt was made but there were errors, or not assessable (N).

Acceptable Target:

A student's ability to translate concepts from another field was deemed acceptable if 2 out of 3 problems were correctly translated at the E or A level. At least 75% of students should be able to correctly translate concepts from other fields.

Implementation Plan (timeline):

Key/Responsible Personnel:

Supporting Attachments:

Findings

for M216 Final Exams

Summary of Findings:

The selected questions for this assessment item were successfully completed by the student at or above the Acceptable level, therefore, this outcome was met.

Acceptable Target Achievement:

Met

Reflections/Notes:

Substantiating Evidence:

Action

in Include data collected in 2019-2020 - Action Plan

Inclusion of external fields

Action details:

The findings in this report were discussed among math faculty. Since our findings were incomplete, we plan significant changes at this time. We will continue to include a focus on translating problems from other fields in MATH-M216 and to be sure that future assessment artifacts include appropriate items in MATH-M303 and MATH-M215.

Additionally, in order to increase student success in MATH-M215 a group of faculty will be in communication with each other to find resources to offer to mathematics majors so that they can be successful in the introductory Calculus course hence can proceed with their academic program.

Implementation Plan (timeline):

Key/Responsible

Personnel:

Measures:

Supporting Attachments:

No Status Added to Inclusion of external fields

Measure

M303 Final Exams

COURSE LEVEL; DIRECT - EXAM

Details/Description:

This class is typically taken by many School of Sciences majors, including math majors, as well as secondary education majors, and math minors. It was offered in Fall 2019 with 15 (16 before withdraws) students enrolled, 4 of which were math majors.

Student responses were determined to be exemplary (E) if the concept was correctly translated from the outside field, acceptable (A) if the concept was mostly translated correctly, revision needed (R) if an attempt was made but there were errors, or not assessable (N).

Acceptable Target:

A student's ability to translate concepts from another field was deemed acceptable if 2 out of 3 problems were correctly translated at the E or A level. At least 75% of students should be able to correctly translate concepts from other fields.

Implementation Plan (timeline):

Key/Responsible Personnel:

Supporting Attachments:

Findings
for M303 Final Exams

Summary of Findings:

There was no assessment of this outcome during this academic year due to the construction of the final exam.

Acceptable Target Achievement:

Reflections/Notes:

Due to oversight by the instructor of this course, the final exam did not include relevant items for assessment purposes. The faculty have formed a team to communicate which outcomes will be assessed and have begun creating a repository where assessment resources can be easily accessed and added to future courses.

Substantiating Evidence:

Action
in Include data collected in 2019-2020 - Action Plan

Inclusion of external fields

No Status Added to Inclusion of external fields

Action details:

The findings in this report were discussed among math faculty. Since our findings were incomplete, we plan significant changes at this time. We will continue to include a focus on translating

problems from other fields in MATH-M216 and to be sure that future assessment artifacts include appropriate items in MATH-M303 and MATH-M215.

Additionally, in order to increase student success in MATH-M215 a group of faculty will be in communication with each other to find resources to offer to mathematics majors so that they can be successful in the introductory Calculus course hence can proceed with their academic program.

**Implementation Plan
(timeline):**

Key/Responsible

Personnel:

Measures:

Supporting Attachments: