

Report Generated by Taskstream

Workspace: Academic Program Assessment and Planning Workspace

Assessment Plan Template : IU Kokomo Academic Assessment Template [

Report Generated : Tuesday, September 01, 2020

Organizational Area	Summary Results	2018-2019 Academic Year Data or 2018 Calendar Year Data - Action Plan Summary Results																																																																		
Indiana University System AMS » Indiana University: Kokomo » Academic Affairs » School of Sciences <b>Mathematics</b>	<p><b>Overall Statistics</b></p> <ul style="list-style-type: none"> <li>• <b>9%</b> (1/11) outcomes were included</li> <li>• <b>100%</b> (1/1) of outcomes included have at least one measure specified</li> <li>• <b>100%</b> (1/1) of outcomes included have measures with findings specified</li> </ul> <table border="1" data-bbox="531 483 1530 873"> <thead> <tr> <th colspan="2">7 Total Measures</th> <th colspan="2">7 Total Measures with Findings</th> </tr> </thead> <tbody> <tr> <td colspan="2"><b>Measure Type/Method</b></td> <td colspan="2"><b>Measure Level</b></td> </tr> <tr> <td>Student</td> <td>0 (0%)</td> <td>Course</td> <td>7 (100%)</td> </tr> <tr> <td>Artifact</td> <td>0 (0%)</td> <td>Program</td> <td>0 (0%)</td> </tr> <tr> <td>Exam</td> <td>7 (100%)</td> <td>Institution</td> <td>0 (0%)</td> </tr> <tr> <td>Portfolio</td> <td>0 (0%)</td> <td>Other</td> <td>0 (0%)</td> </tr> <tr> <td>Other</td> <td>0 (0%)</td> <td>Unspecified</td> <td>0 (0%)</td> </tr> <tr> <td><b>Total Direct</b></td> <td><b>7 (100%)</b></td> <td colspan="2"></td> </tr> <tr> <td>Survey</td> <td>0 (0%)</td> <td colspan="2"></td> </tr> <tr> <td>Focus Group</td> <td>0 (0%)</td> <td colspan="2"></td> </tr> <tr> <td>Interview</td> <td>0 (0%)</td> <td colspan="2"></td> </tr> <tr> <td>Other</td> <td>0 (0%)</td> <td colspan="2"></td> </tr> <tr> <td><b>Total Indirect</b></td> <td><b>0 (0%)</b></td> <td colspan="2"></td> </tr> <tr> <td><b>Unspecified</b></td> <td><b>0 (0%)</b></td> <td colspan="2"></td> </tr> </tbody> </table> <table border="1" data-bbox="1031 540 1530 873"> <thead> <tr> <th colspan="2"><b>Acceptable Target Achievement</b></th> </tr> </thead> <tbody> <tr> <td>Not Met</td> <td>3 (43%)</td> </tr> <tr> <td>Met</td> <td>1 (14%)</td> </tr> <tr> <td>Exceeded</td> <td>3 (43%)</td> </tr> <tr> <td>Unspecified</td> <td>0 (0%)</td> </tr> </tbody> </table>	7 Total Measures		7 Total Measures with Findings		<b>Measure Type/Method</b>		<b>Measure Level</b>		Student	0 (0%)	Course	7 (100%)	Artifact	0 (0%)	Program	0 (0%)	Exam	7 (100%)	Institution	0 (0%)	Portfolio	0 (0%)	Other	0 (0%)	Other	0 (0%)	Unspecified	0 (0%)	<b>Total Direct</b>	<b>7 (100%)</b>			Survey	0 (0%)			Focus Group	0 (0%)			Interview	0 (0%)			Other	0 (0%)			<b>Total Indirect</b>	<b>0 (0%)</b>			<b>Unspecified</b>	<b>0 (0%)</b>			<b>Acceptable Target Achievement</b>		Not Met	3 (43%)	Met	1 (14%)	Exceeded	3 (43%)	Unspecified	0 (0%)	<p><b>0 Total Actions with Status Report</b></p> <p><i>No Status Reports have been specified</i></p>
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Report : Assessment Cycle Details for : Mathematics

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Workspace : Academic Program Assessment and Planning Workspace

Assessment Plan: 2019-2020 Assessment Cycle: Assessment Plan and Assessment Findings

Assessment Plan Template : IU Kokomo Academic Assessment Template

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## Measures and Findings

### *Mathematics Outcome Set*

#### Outcome

#### **Outcome 4.2 Notation/Vocabulary**

*Students will use correct mathematical vocabulary and mathematical notation.*

#### **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 2018 with 32 (37 before withdraws) students enrolled, 2 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 all notation was used correctly, acceptable (A) if most notation was used correctly with a few errors, revision needed (R) if an attempt was made but there were significant errors, or not assessable (N).

#### **Acceptable Target:**

A students' use of notation and vocabulary was deemed acceptable if both of the questions were at the E or A level. At least 75% of students should be using vocabulary and notation at an acceptable level.

#### **Implementation Plan (timeline):**

#### **Key/Responsible Personnel:**

#### **Supporting Attachments:**

#### **Findings**

*for M215 Final Exams*

#### **Summary of Findings:**

Of the 2 math majors in the class, 100% were judged to be using correct mathematical vocabulary and notation with an acceptable level of proficiency. Of all 32

of the students enrolled, 65.6% were judged to be using correct mathematical vocabulary and notation with an acceptable level of proficiency. Nine students were judged to be using correct mathematical vocabulary and notation below an acceptable level of proficiency and two students did not take the final exam.

**Acceptable Target Achievement:**

Met

**Reflections/Notes:**

While overall the class did not meet the acceptable target, the math majors exceeded it.

**Substantiating Evidence:**

***Action***

*in 2018-2019 Academic Year Data or 2018 Calendar Year Data - Action Plan*

***Continued/increased focus on definitions and notation in feedback***

*No Status Added to Continued/increased focus on definitions and notation in feedback*

**Action details:**

Findings were discussed among math faculty. Since our findings were satisfactory or close to satisfactory for the majority of courses, we do not plan significant changes at this time. However, since our findings were not satisfactory for some courses, we agreed to increase our focus on notation and definitions when giving feedback on student work in the future.

**Implementation Plan**

**(timeline):**

**Key/Responsible**

**Personnel:**

**Measures:**

**Supporting Attachments:**

***Measure***

## *M216 Final Exams*

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### **COURSE LEVEL; DIRECT - EXAM**

#### **Details/Description:**

This class is typically taken by math majors, secondary education majors, computer science majors, and math minors. It was offered in Spring 2019 with 14 (16 before withdraws) students enrolled, 2 of which were math majors.

Two questions from the final exam (questions #1 and #9) were selected for assessing students' use of correct mathematical vocabulary and notation. On question 1 students were assessed on correct use of integral notation, and on question 9 assessed on correct use of series notation. Student responses were determined to be exemplary (E) if all notation was used correctly, acceptable (A) if most notation was used correctly with a few errors, revision needed (R) if an attempt was made but there were significant errors, or not assessable (N).

#### **Acceptable Target:**

A students' use of notation and vocabulary was deemed acceptable if both of the questions were at the E or A level. At least 75% of students should be using vocabulary and notation at an acceptable level.

#### **Implementation Plan (timeline):**

#### **Key/Responsible Personnel:**

#### **Supporting Attachments:**

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### ***Findings***

#### *for M216 Final Exams*

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#### **Summary of Findings:**

Of the 2 math majors in the class, 100% were judged to be using correct mathematical vocabulary and notation with an acceptable level of proficiency. Of all 14 of the students enrolled, 78.6% were judged to be using correct mathematical vocabulary and notation with an acceptable level of proficiency. 2 students were judged to be using correct mathematical vocabulary and notation below an acceptable level of proficiency and one student did not take the final exam.

#### **Acceptable Target Achievement:**

Exceeded

#### **Reflections/Notes:**

#### **Substantiating Evidence:**

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### ***Action***

#### *in 2018-2019 Academic Year Data or 2018 Calendar Year Data - Action Plan*

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***Continued/increased  
focus on definitions***

*No Status Added to Continued/increased focus  
on definitions and notation in feedback*

***and notation in  
feedback***

**Action details:**

Findings were discussed among math faculty. Since our findings were satisfactory or close to satisfactory for the majority of courses, we do not plan significant changes at this time. However, since our findings were not satisfactory for some courses, we agreed to increase our focus on notation and definitions when giving feedback on student work in the future.

**Implementation Plan  
(timeline):**

**Key/Responsible  
Personnel:**

**Measures:**

**Supporting Attachments:**

***Measure***

*M303*

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**COURSE LEVEL; DIRECT - EXAM**

**Details/Description:**

This class is typically taken by math majors, secondary education majors, computer science majors, and math minors. It was offered in Fall 2018 with 8 students enrolled, 3 of which were math majors.

Two questions from the final exam (questions #1(a) and 1(b)) were selected for assessing students' use of correct mathematical vocabulary and notation. Question 1(a) was asked students to write a matrix equation and question 1(b) asked students to write a solution in parametric vector form. Student responses were determined to be exemplary (E) if all notation was used correctly, acceptable (A) if most notation was used correctly with a few errors, revision needed (R) if an attempt was made but there were significant errors, or not assessable (N).

**Acceptable Target:**

A students' use of notation and vocabulary was deemed acceptable if both of the questions were at the E or A level. At least 75% of students should be using vocabulary and notation at an acceptable level.

**Implementation Plan (timeline):**

**Key/Responsible Personnel:**

**Supporting Attachments:**

## ***Findings***

*for M303*

### **Summary of Findings:**

Of the 3 math majors in the class, 66.7% were judged to be using correct mathematical vocabulary and notation with an acceptable level of proficiency. Of all 8 of the students enrolled, 75% were judged to be using correct mathematical vocabulary and notation with an acceptable level of proficiency.

### **Acceptable Target Achievement:**

Not Met

### **Reflections/Notes:**

### **Substantiating Evidence:**

## ***Action***

*in 2018-2019 Academic Year Data or 2018 Calendar Year Data - Action Plan*

***Continued/increased focus on definitions and notation in feedback***

### **Action details:**

Findings were discussed among math faculty. Since our findings were satisfactory or close to satisfactory for the majority of courses, we do not plan significant changes at this time. However, since our findings were not satisfactory for some courses, we agreed to increase our focus on notation and definitions when giving feedback on student work in the future.

**Implementation Plan (timeline):**

**Key/Responsible**

*No Status Added to Continued/increased focus on definitions and notation in feedback*

**Personnel:**

**Measures:**

**Supporting Attachments:**

## ***Measure***

### *M311 Final Exams*

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#### **COURSE LEVEL; DIRECT - EXAM**

#### **Details/Description:**

This class is typically taken by math majors, secondary education majors, and math minors. It was offered in spring 2019 with 4 students enrolled, 3 of which were math majors. Two questions from the final exam (questions #2 and #3) were selected for assessing students' use of correct mathematical vocabulary and notation. On question 2, students were assessed on their correct use of integral notation, and on question 3 students were assessed on their use of vector notation and notation for the equation of a plane. Student responses were determined to be exemplary (E) if all notation was used correctly, acceptable (A) if most notation was used correctly with a few errors, revision needed (R) if an attempt was made but there were significant errors, or not assessable (N).

#### **Acceptable Target:**

A students' use of notation and vocabulary was deemed acceptable if both of the questions were at the E or A level. At least 75% of students should be using vocabulary and notation at an acceptable level.

#### **Implementation Plan (timeline):**

#### **Key/Responsible Personnel:**

#### **Supporting Attachments:**

## ***Findings***

### *for M311 Final Exams*

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#### **Summary of Findings:**

Of the 3 math majors in the class, 66.7% were judged to be using correct mathematical vocabulary and notation with an acceptable level of proficiency. Of all 4 of the students enrolled, 75% were judged to be using correct mathematical vocabulary and notation with an acceptable level of proficiency.

#### **Acceptable Target Achievement:**

Not Met

#### **Reflections/Notes:**

#### **Substantiating Evidence:**

## ***Action***

*in 2018-2019 Academic Year Data or 2018 Calendar Year Data - Action Plan*

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***Continued/increased focus on definitions and notation in feedback***

*No Status Added to Continued/increased focus on definitions and notation in feedback*

**Action details:**

Findings were discussed among math faculty. Since our findings were satisfactory or close to satisfactory for the majority of courses, we do not plan significant changes at this time. However, since our findings were not satisfactory for some courses, we agreed to increase our focus on notation and definitions when giving feedback on student work in the future.

**Implementation Plan (timeline):**

**Key/Responsible Personnel:**

**Measures:**

**Supporting Attachments:**

## ***Measure***

### ***M413 Final Exams***

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**COURSE LEVEL; DIRECT - EXAM**

**Details/Description:**

This class is typically taken only by math majors and secondary education majors. It was offered in Fall 2018 with 4 students enrolled.

Two questions from the final exams (questions #1 and #2 from the in-class exam) were selected for assessing students' use of correct mathematical vocabulary and notation. These questions asked students to complete the statements of definitions and theorems. Student responses were determined to be exemplary (E) if all notation and vocabulary was used correctly, acceptable (A) if most vocabulary and notation was used correctly with a few errors, revision needed (R) if an attempt was made but there were significant errors, or not assessable (N).

**Acceptable Target:**

A students' use of notation and vocabulary was deemed acceptable if both questions were at the E or A level. At least 75% of students should be using vocabulary and notation at an acceptable level.

**Implementation Plan (timeline):**

**Key/Responsible Personnel:**

Amelia Tebbe

**Supporting Attachments:**

***Findings***

*for M413 Final Exams*

**Summary of Findings:**

Of the 4 students in the class, 100% were judged to be using correct mathematical vocabulary and notation with an acceptable level of proficiency.

**Acceptable Target Achievement:**

Exceeded

**Reflections/Notes:**

**Substantiating Evidence:**

***Action***

*in 2018-2019 Academic Year Data or 2018 Calendar Year Data - Action Plan*

***Continued/increased focus on definitions and notation in feedback***

**Action details:**

Findings were discussed among math faculty. Since our findings were satisfactory or close to satisfactory for the majority of courses, we do not plan significant changes at this time. However, since our findings were not satisfactory for some courses, we agreed to increase our focus on notation and definitions when giving feedback on student work in the future.

*No Status Added to Continued/increased focus on definitions and notation in feedback*

**Implementation Plan****(timeline):****Key/Responsible****Personnel:****Measures:****Supporting Attachments:*****Measure******M463 Final Exams***

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**COURSE LEVEL; DIRECT - EXAM****Details/Description:**

This class is typically taken only by math majors and secondary education majors. It was offered in Fall 2018 with 3 students enrolled.

Two questions from the final exams (questions #1 and #2 from the in-class exam) were selected for assessing students' use of correct mathematical vocabulary and notation. These questions asked students to determine with justification whether two events were independent, and to describe in words what a random variable is. Student responses were determined to be exemplary (E) if all notation and vocabulary was used correctly, acceptable (A) if most vocabulary and notation was used correctly with a few errors, revision needed (R) if an attempt was made but there were significant errors, or not assessable (N).

**Acceptable Target:**

A students' use of notation and vocabulary was deemed acceptable if both questions were at the E or A level. At least 75% of students should be using vocabulary and notation at an acceptable level.

**Implementation Plan (timeline):****Key/Responsible Personnel:****Supporting Attachments:*****Findings******for M463 Final Exams***

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**Summary of Findings:**

Of the 3 students in the class, 33% were judged to be using correct mathematical vocabulary and notation with an acceptable level of proficiency.

**Acceptable Target Achievement:**

Not Met

**Reflections/Notes:**

**Substantiating Evidence:**

***Action***

*in 2018-2019 Academic Year Data or 2018 Calendar Year Data - Action Plan*

***Continued/increased focus on definitions and notation in feedback***

*No Status Added to Continued/increased focus on definitions and notation in feedback*

**Action details:**

Findings were discussed among math faculty. Since our findings were satisfactory or close to satisfactory for the majority of courses, we do not plan significant changes at this time. However, since our findings were not satisfactory for some courses, we agreed to increase our focus on notation and definitions when giving feedback on student work in the future.

**Implementation Plan**

**(timeline):**

**Key/Responsible**

**Personnel:**

**Measures:**

**Supporting Attachments:**

***Measure***

*M466 Final Exams*

**COURSE LEVEL; DIRECT - EXAM**

**Details/Description:**

This class is typically taken only by math majors and secondary education majors. It was offered in Spring 2019 with 3 students enrolled.

Three questions from the final exams (questions #1, #2, and #3 from the in-class exam) were selected for assessing students' use of correct mathematical vocabulary and notation. The first two questions asked students to justify their answers on questions related to independent random variables and statistical hypotheses. The third asked to complete a

definition. Student responses were determined to be exemplary (E) if all notation and vocabulary was used correctly, acceptable (A) if most vocabulary and notation was used correctly with a few errors, revision needed (R) if an attempt was made but there were significant errors, or not assessable (N).

**Acceptable Target:**

A students' use of notation and vocabulary was deemed acceptable if at least two of the three questions were at the E or A level. At least 75% of students should be using vocabulary and notation at an acceptable level.

**Implementation Plan (timeline):**

**Key/Responsible Personnel:**

**Supporting Attachments:**

***Findings***  
*for M466 Final Exams*

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**Summary of Findings:**

Of the 3 students in the class, 100% were judged to be using correct mathematical vocabulary and notation with an acceptable level of proficiency.

**Acceptable Target Achievement:**

Exceeded

**Reflections/Notes:**

**Substantiating Evidence:**

***Action***  
*in 2018-2019 Academic Year Data or 2018 Calendar Year Data - Action Plan*

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***Continued/increased focus on definitions and notation in feedback***

**Action details:**

Findings were discussed among math faculty. Since our findings were satisfactory or close to satisfactory for the majority of courses, we do not plan significant changes at this time. However, since our findings were not satisfactory for some courses, we agreed to

*No Status Added to Continued/increased focus on definitions and notation in feedback*

increase our focus on notation and definitions when giving feedback on student work in the future.

**Implementation Plan (timeline):**

**Key/Responsible Personnel:**

**Measures:**

**Supporting Attachments:**