

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 Chemistry/BioChemistry	<p>Overall Statistics</p> <ul style="list-style-type: none"> • 33% (1/3) 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"> <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">Measure Type/Method</td> <td colspan="2">Measure Level</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>5 (71%)</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>2 (29%)</td> <td>Unspecified</td> <td>0 (0%)</td> </tr> <tr> <td>Total Direct</td> <td>7 (100%)</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>Total Indirect</td> <td>0 (0%)</td> <td colspan="2"></td> </tr> <tr> <td>Unspecified</td> <td>0 (0%)</td> <td colspan="2"></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="2">Acceptable Target Achievement</th> </tr> </thead> <tbody> <tr> <td>Not Met</td> <td>0 (0%)</td> </tr> <tr> <td>Met</td> <td>4 (57%)</td> </tr> <tr> <td>Exceeded</td> <td>0 (0%)</td> </tr> <tr> <td>Unspecified</td> <td>3 (43%)</td> </tr> </tbody> </table>	7 Total Measures		7 Total Measures with Findings		Measure Type/Method		Measure Level		Student	0 (0%)	Course	7 (100%)	Artifact	0 (0%)	Program	0 (0%)	Exam	5 (71%)	Institution	0 (0%)	Portfolio	0 (0%)	Other	0 (0%)	Other	2 (29%)	Unspecified	0 (0%)	Total Direct	7 (100%)			Survey	0 (0%)			Focus Group	0 (0%)			Interview	0 (0%)			Other	0 (0%)			Total Indirect	0 (0%)			Unspecified	0 (0%)			Acceptable Target Achievement		Not Met	0 (0%)	Met	4 (57%)	Exceeded	0 (0%)	Unspecified	3 (43%)	<p>0 Total Actions with Status Report</p> <p><i>No Status Reports have been specified</i></p>
7 Total Measures		7 Total Measures with Findings																																																																		
Measure Type/Method		Measure Level																																																																		
Student	0 (0%)	Course	7 (100%)																																																																	
Artifact	0 (0%)	Program	0 (0%)																																																																	
Exam	5 (71%)	Institution	0 (0%)																																																																	
Portfolio	0 (0%)	Other	0 (0%)																																																																	
Other	2 (29%)	Unspecified	0 (0%)																																																																	
Total Direct	7 (100%)																																																																			
Survey	0 (0%)																																																																			
Focus Group	0 (0%)																																																																			
Interview	0 (0%)																																																																			
Other	0 (0%)																																																																			
Total Indirect	0 (0%)																																																																			
Unspecified	0 (0%)																																																																			
Acceptable Target Achievement																																																																				
Not Met	0 (0%)																																																																			
Met	4 (57%)																																																																			
Exceeded	0 (0%)																																																																			
Unspecified	3 (43%)																																																																			

Report : Assessment Cycle Details for : Chemistry/BioChemistry

Report Generated by Taskstream

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

Report Generated : Tuesday, September 01, 2020

Measures and Findings

Goal III: Application of Quantitative Reasoning Skills and Critical Thinking to Problem Solving

Outcome

Outcome 3.2

Students will calculate quantitative values and / or formulate an explanation of observations.

Components:

1. Application of theories to illustrate how observations can be understood.

2. Application of equations to determine mathematical values with appropriate significant figures and units.

Mapped to:

No Mapping

Measure

Final exam for C106

COURSE LEVEL; DIRECT - EXAM

Details/Description:

Component 1 & 2

Course: C106 (Chemical kinetics and thermodynamics. Sp2019

Method: Student applied theoretical bases for chemical. Kinetics and thermodynamics to determine the reaction rates at different temperatures . They were able to determine the other thermodynamic functions such as free energy, and entropy ..

Acceptable Target:

70%

Implementation Plan (timeline):

Spring 2019

Key/Responsible Personnel:

Kasem K. Kasem

Supporting Attachments:

Findings

for Final exam for C106

Summary of Findings:

Biochemistry/Chemistry majors: 75% (6/8 students)

Biology/BIPH/Psychology majors: 60% (26/43 students)

Acceptable Target Achievement:

Met

Reflections/Notes:

The chemistry majors did meet the target, while BIPH students did not meet the target

Substantiating Evidence:

Measure

ACS Final Exam (question 56 on Yellow version and 58 on Gray version)

COURSE LEVEL; DIRECT - EXAM

Details/Description:

Component 2: Application of equations to determine mathematical values with appropriate significant figures and units

Course: C105 FA18

Method: ACS Final Exam (question 56 on Yellow version and 58 on Gray version): Calculate the number of moles of a gas sample from its given volume, pressure, and temperature.

Acceptable Target:

Student make 70%

Implementation Plan (timeline):

Key/Responsible Personnel:

Mohammed Hussien

Supporting Attachments:

Findings

for ACS Final Exam (question 56 on Yellow version and 58 on Gray version)

Summary of Findings:

Biochemistry/Chemistry majors: 100% (6/6 students)

Science majors: 80.9% (38/47 students)

Acceptable Target Achievement:

Met

Reflections/Notes:

All students of Biochemistry and chemistry majors achieved the goals in component 2, further science majors 81% achieved the goal in component 2 .

Substantiating Evidence:

Measure

ACS Final Exam (question 61 on both Yellow and Gray versions):

COURSE LEVEL; DIRECT - EXAM

Details/Description:

Component 1: Application of theories to illustrate how observations can be understood

Course: C105 FA18

Method: ACS Final Exam (question 61 on both Yellow and Gray versions): If equal amount of heat is absorbed by equal mass of different metals with different specific heats, which metal will be the hottest body.

Acceptable Target:

students make 70%

Implementation Plan (timeline):

Key/Responsible Personnel:

Mohammed Hussien

Supporting Attachments:

Findings

for ACS Final Exam (question 61 on both Yellow and Gray versions):

Summary of Findings:

Biochemistry/Chemistry majors: 66.7% (4/6 students) answered the question correctly

Science majors: 66% (31/47 students) answered the question correctly

Acceptable Target Achievement:

Reflections/Notes:

Chemistry and biochemistry students made the target goal, however non -chemistry students did not make the target.

Substantiating Evidence:

Action

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

C105 Expanding pre - final exam reviews and preparations.

Action details:

Providing more instructional resources , such as tutors, etc,

Implementation Plan

No Status Added to C105 Expanding pre -final exam reviews and preparations.

(timeline):

C105 will be offered at IUK in spring 2020, we will implement the suggested actions in spring 2020 , and fall of 2020.

Key/Responsible**Personnel:**

Hisako (spring 2020),
Mohammed Hussien for
fall 2020

Measures:**Supporting Attachments:*****Measure***

Exam 2 question 22: for C340 SP19

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

C340 SP19 . Method: Exam 2 question 22: Using a protein-ligand binding curve to determine the relative strength of binding

Acceptable Target:

70% Achieve

Implementation Plan (timeline):**Key/Responsible Personnel:**

Hisako Masuda

Supporting Attachments:***Findings***

for Exam 2 question 22: for C340 SP19

Summary of Findings:

Biochemistry/Chemistry majors: 100% (5/5 students)
Biology/BIPH/Psychology majors: 92% (11/12 students)

Acceptable Target Achievement:**Reflections/Notes:****Substantiating Evidence:*****Measure***

Final exam

COURSE LEVEL; DIRECT - EXAM

Details/Description:

Component 1: Application of theories to illustrate how observations can be understood

Course: C310 (Pulsed techniques in electrochemical methods . Sp2019

Method: Student test different pulsed techniques to find out which electrochemical techniques eliminated the capacitive current (selectivity and sensitivity) to the given quantity of the given analyte based on the studied theory about pulsed technique.

Component 2: Application of equations to determine mathematical values with appropriate significant figures and units:

Course: C310 Sp 2019

Method: Student were given unknown mix to analyses them using absorption spectroscopy. The student used equations to calculate the amount of each unknown.

Acceptable Target:

70 % achieve

Implementation Plan (timeline):

cumulative exam at the end of the semester.

Key/Responsible Personnel:

kasem K. Kasem

Supporting Attachments:

Findings *for Final exam*

Summary of Findings:

component one

Biochemistry/Chemistry majors: 75% (3/4 students)

Biology/BIPH/Psychology majors: 60% (6/10 students)

component two

Biochemistry/Chemistry majors: 75% (3/4 students)

Biology majors: 60% (6/10 students)

Acceptable Target Achievement:

Reflections/Notes:

Biology majors did not achieve the target mark of 70 % .

Substantiating Evidence:

Action

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

Instructional modifications for C106

No Status Added to Instructional modifications for C106

Action details:

- 1- I will increase the discussions of the data interpretation .
- 2- Give more instructional resources for student specially science students

Implementation Plan

(timeline):

Spring 2020,.

Key/Responsible

Personnel:

Kasem K. Kasem

Measures:

Exams

Supporting Attachments:

C310 further action

No Status Added to C310 further action

Action details:

For non-chemistry majors we should increase and change instructional resources .

Implementation Plan

(timeline):

spring 2020

Key/Responsible

Personnel:

Kasem K. Kasem

Measures:

Supporting Attachments:

Measure

Lab analysis for C340 SP 19

COURSE LEVEL; DIRECT - OTHER

Details/Description:

Course: C340 SP19

Method: In the lab exercise for PCR-based cloning of a gene into plasmid, students analyzed 1) why PCR did not work and changed the condition for the re-run, and 2) analyzed the possible reasons for the effectiveness of each condition and wrote in lab report.

Acceptable Target:

70%

Implementation Plan (timeline):

Key/Responsible Personnel:

Hisako Musoda

Supporting Attachments:

Findings

for Lab analysis for C340 SP 19

Summary of Findings:

Biochemistry/Chemistry majors: 100% (4/4 students)

Acceptable Target Achievement:

Met

Reflections/Notes:

Substantiating Evidence:

Measure

Lab calculation

COURSE LEVEL; DIRECT - OTHER

Details/Description:

Course: C329 FA18

Method: Lab 1: calculate the concentration of protein solutions using standard curve.

Acceptable Target:

70 % of student achieve

Implementation Plan (timeline):

Key/Responsible Personnel:

Hisako Masuda

Supporting Attachments:

Findings
for Lab calculation

Summary of Findings:

Biochemistry/Chemistry majors: 100% (5/5 students)

Biology/BIPH/Psychology majors: 100% (12/12 students)

Acceptable Target Achievement:

Met

Reflections/Notes:

Substantiating Evidence: