

## Section Innovation Plan

## Action Plan Report by Response

Chemistry

Date: 10/12/2017

Status: Not Started

Status Summary:

## Summary

Term	Total Actions	Completed Actions	Incomplete Actions	Resource Requests
Fall 2016	60	60	0	1
Spring 2016	60	60	0	1

## Detail by Response

Section Level Responses					
Expected Action	Action Type	Respondent	Action Taken	Date	Resource Request
SCI >> Chemistry >> CHEM1510 >> Section 20 - Fall 2016					
Briefly describe where your students demonstrated strengths in their learning.	Reflection	Anonymous	The majority of students completed the molar mass calculation with no difficulty. This indicated that they had sufficient preparation, having completed similar calculations a large portion of the semester.	2016-12-15	
Briefly describe where your students demonstrated gaps in their learning.	Reflection	Anonymous	The molar mass was introduced as a conversion factor as part of an extended question. The students who scored a (0) did so because they appeared to be confused with what they wrote for the conversion factor or started the calculation and became lost.	2016-12-15	
What additional information did you glean from your findings?	Reflection	Anonymous	I also emphasize attention to detail and try to put in perspective the need to perform calculations and how those types of calculations with the correct units are so important for certain real world applications. I believe students pay attention to details sometimes and at other times they do not. The overall scores for the class were quite good, so this is a positive reinforcement of the current curriculum structure.	2016-12-15	
What methods of authentic assessment did you employ to determine SLO results for your students?	Reflection	Anonymous	The assessment was free mathematical response. This provides the only authentic method to test the conceptual application of knowledge in a calculation.	2016-12-15	
How might your findings relate to program improvement?	Reflection	Anonymous	The scope of the assessment is narrow, however, it is clear that students who had difficulty need to work on the specific skills required to perform a sequential calculation of the type evaluated here. It would be difficult to affect a program-wide change as a result of this assessment. Unless this skill set was identified as a problem area across the program curriculum, which it has not, there would be no basis on which to recommend improvements.	2016-12-15	
What professional development activities would assist you in improving your course or program?	Reflection	Anonymous	Workshops and conferences in chemistry might yield some ideas for demonstrations.	2016-12-15	

Expected Action	Action Type	Respondent	Action Taken	Date	Resource Request
What types of assistance outside of the classroom would benefit the students in mastery of the SLOs, ie tutoring, workshops, resources in the library, from student services, etc?	New Resources	Anonymous	The students have access to a website with over 140 fully solved chemistry problems worked out by Mike Mayfield. Many of those problems require calculations directly or indirectly related to molar mass calculations. Also, students are made aware of the math tutoring services in the library and of the instructor's office hours. I also have links on the course Canvas site specifically to help with mathematics problems related to calculations we perform in the class.	2016-12-15	
Please list any additional technology or resources would improve SLO results?	New Resources	Anonymous	Purchase software, equipment, and provide an additional physical science lab/ classroom used exclusively for that purpose.	2016-12-15	Name: Additional Physical science lab Detail: Need an additional physical science classroom and lab. Status: Pending
What types of changes within your course do you think would assist your students in mastery of the SLOs?	Faculty Proposed Actions	Anonymous	The entire course emphasizes unit conversions and units as being of paramount importance for chemistry calculations. Several fully solved problems are worked out in multiple class sessions. The only additional work that could be of value would be to assign more homework problems addressing the specific calculations required for molar mass. Perhaps 100 to 200 additional calculations would be sufficient to help students with the mathematical portion, as well as not forgetting to write the appropriate units.	2016-12-15	
What dialogue do you plan to have regarding your findings?	Faculty Proposed Actions	Anonymous	Dialogue is a continuous process with students. The areas they need to improve in are something that is discussed as they complete assignments throughout the semester. There is regular dialogue among faculty who teach this course, particularly when there are identified issues with student understanding in various topics.	2016-12-15	
SCI >> Chemistry >> CHEM1510 >> Section 20 - Spring 2016					
Briefly describe where your students demonstrated strengths in their learning.	Reflection	Anonymous	The majority of students completed the molar mass calculation with no difficulty. This indicated that they had sufficient preparation, having completed similar calculations a large portion of the semester.	2016-05-18	
Briefly describe where your students demonstrated gaps in their learning.	Reflection	Anonymous	The molar mass was introduced as a conversion factor as part of an extended question. The students who scored a (0) did so because they appeared to be confused with what they wrote for the conversion factor or started the calculation and became lost.	2016-05-18	
What additional information did you glean from your findings?	Reflection	Anonymous	I also emphasize attention to detail and try to put in perspective the need to perform calculations and how those types of calculations with the correct units are so important for certain real world applications. I believe students pay attention to details sometimes and at other times they do not. The overall scores for the class were quite good, so this is a positive reinforcement of the current curriculum structure.	2016-05-18	
What methods of authentic assessment did you employ to determine SLO results for your students?	Reflection	Anonymous	The assessment was free mathematical response. This provides the only authentic method to test the conceptual application of knowledge in a calculation.	2016-05-18	
How might your findings relate to program improvement?	Reflection	Anonymous	The scope of the assessment is narrow, however, it is clear that students who had difficulty need to work on the specific skills required to perform a sequential calculation of the type evaluated here. It would be difficult to affect a program-wide change as a result of this assessment. Unless this skill set was identified as a problem area across the program curriculum, which it has not, there would be no basis on which to recommend improvements.	2016-05-18	

Expected Action	Action Type	Respondent	Action Taken	Date	Resource Request
What professional development activities would assist you in improving your course or program?	Reflection	Anonymous	Workshops and conferences in chemistry might yield some ideas for demonstrations.	2016-05-18	
What types of assistance outside of the classroom would benefit the students in mastery of the SLOs, ie tutoring, workshops, resources in the library, from student services, etc?	New Resources	Anonymous	The students have access to a website with over 140 fully solved chemistry problems worked out by Mike Mayfield. Many of those problems require calculations directly or indirectly related to molar mass calculations. Also, students are made aware of the math tutoring services in the library and of the instructor's office hours. I also have links on the course Moodle site specifically to help with mathematics problems related to calculations we perform in the class.	2016-05-18	
Please list any additional technology or resources would improve SLO results?	New Resources	Anonymous	Purchase software, equipment, and provide an additional physical science lab/ classroom used exclusively for that purpose.	2016-05-18	Name: Science Lab Detail: Physical Science Lab Status: Pending  Name: Classroom Detail: Physical Science Classroom Status: Pending  Name: Purchase Lab Equipment Detail: 100000 Status: Pending
What types of changes within your course do you think would assist your students in mastery of the SLOs?	Faculty Proposed Actions	Anonymous	The entire course emphasizes unit conversions and units as being of paramount importance for chemistry calculations. Several fully solved problems are worked out in multiple class sessions. The only additional work that could be of value would be to assign more homework problems addressing the specific calculations required for molar mass. Perhaps 100 to 200 additional calculations would be sufficient to help students with the mathematical portion, as well as not forgetting to write the appropriate units.	2016-05-18	
What dialogue do you plan to have regarding your findings?	Faculty Proposed Actions	Anonymous	Dialogue is a continuous process with students. The areas they need to improve in are something that is discussed as they complete assignments throughout the semester. There is regular dialogue among faculty who teach this course, particularly when there are identified issues with student understanding in various topics.	2016-05-18	
SCI >> Chemistry >> CHEM1510 >> Section 21 - Spring 2016					
Briefly describe where your students demonstrated strengths in their learning.	Reflection	Anonymous	Results of the SLO question showed that nine students demonstrated mastery of the concept and six students met the expectation of the concept out of a total of 19 enrolled students. Taking into account that two students did not take the final exam, this is an 88.2 percent proficiency in the SLO presented to them on the final exam. I believe this is a reflection of the students understanding and comprehension of the SLOs presented for the course.	2016-07-26	
Briefly describe where your students demonstrated gaps in their learning.	Reflection	Anonymous	Results of the SLO question showed that two students demonstrated a gap in learning and understanding of the SLO question presented to them on the final exam. Two students out of the 23 enrolled students did not participate in taking the final exam and therefore were not gauged in the assessment. These two particular student did not meet the expectation of an understanding of the SLO presented to them on the final exam.	2016-07-26	

Expected Action	Action Type	Respondent	Action Taken	Date	Resource Request
What additional information did you glean from your findings?	Reflection	Anonymous	My SLO questions are geared towards student understanding of important concepts presented in my class. I am very pleased with the number of students who show mastery in the outcomes and this is reflected on my relatively high percentage of students who show comprehension of the question on the final exam.	2016-07-26	
What methods of authentic assessment did you employ to determine SLO results for your students?	Reflection	Anonymous	I always ask a specific question on the final exam to determine the mastery of the SLO in my physical science classes. I select a question that I feel is very important to the students understanding of the material and is one of the listed outcomes on the syllabus. We go over the SLOs for each individual chapter we go over in class throughout the semester.	2016-07-26	
How might your findings relate to program improvement?	Reflection	Anonymous	There is always room for improvement in finding creative and different ways to reinforce the important outcomes that students should have mastery in throughout the semester. I look for different demonstrations and software that allow me to reinforce the important student outcomes for the semester. When I get to the point during the semester when we discuss in detail a student outcome, I always like to conduct a demonstration or show a short video presentation with practical uses for the understanding of the particular student outcome. I have found this to be very effective and perhaps why so many students show mastery of the presented SLO question on the final exam.	2016-07-26	
What professional development activities would assist you in improving your course or program?	Reflection	Anonymous	I do try and take a short summer class to help my mastery in the physical sciences. I also take workshops that help me in presenting important concepts in the fields of geology and chemistry. I think it is very important to continue learning my discipline so that I can improve student's mastery of important concepts in the physical sciences discussed throughout the semester.	2016-07-26	
What types of assistance outside of the classroom would benefit the students in mastery of the SLOs, ie tutoring, workshops, resources in the library, from student services, etc?	New Resources	Anonymous	I believe that the physical sciences need a dedicated tutor particularly with techniques for problem solving questions. My limited office hours and students conflicting schedules make it difficult for me to help all of the students on their questions. Many students do form study groups, which is beneficial; however, if there were more options for tutoring then I believe this will benefit all students taking physical science courses. There are numerous resources available for students at the library if they choose to utilize them, and I am clear about my expectations for the class and how to utilize these resources.	2016-07-26	
Please list any additional technology or resources would improve SLO results?	New Resources	Anonymous	I look for different demonstrations and software that allow me to reinforce the important student outcomes for the semester. When I get to the point during the semester when we discuss in detail a student outcome, I always like to conduct a demonstration or show a short video presentation with practical uses for the understanding of the particular student outcome. I have found this to be very effective and perhaps why so many students show mastery of the SLO question presented on the final exam.	2016-07-26	
What types of changes within your course do you think would assist your students in mastery of the SLOs?	Faculty Proposed Actions	Anonymous	I do provide a short list of required outcomes on my syllabus that a student must show proficiency in by the end of the semester. I do introduce the outcomes the first day of class when I pass out the syllabus, and I continue to come back to these important outcomes throughout the semester. Additionally, in all of my classes, I provide the student with individual chapter SLOs and these are used as study guides for the mid-term and final exam. Students are aware of the need to show mastery in these important concepts to succeed on the exams and therefore in the course.	2016-07-26	
What dialogue do you plan to have regarding your findings?	Faculty Proposed Actions	Anonymous	I discuss the results of my SLOs with my Physical Science Program Review Team during in service week. We discuss our method of assessment and the results of our assessment and go over any particular areas of improvement and provide suggestions. The Program Review Team is very good at creating dialogue amongst ourselves about the results of the SLO assessment.	2016-07-26	

Expected Action	Action Type	Respondent	Action Taken	Date	Resource Request
SCI >> Chemistry >> CHEM1510 >> Section 22 - Fall 2016					
Briefly describe where your students demonstrated strengths in their learning.	Reflection	Anonymous	Results of the SLO question showed that eight students demonstrated mastery of the concept and ten students met the expectation of the concept out of a total of 20 enrolled students. This is an 90.0 percent proficiency in the SLO presented to them on the final exam. I believe this a reflection of the students understanding and comprehension of the SLOs presented for the course.	2017-01-10	
Briefly describe where your students demonstrated gaps in their learning.	Reflection	Anonymous	Results of the SLO question showed that two students demonstrated a gap in learning and understanding of the SLO question presented to them on the final exam. These two particular students did not meet the expectation of an understanding of the SLO presented to them on the final exam.	2017-01-10	
What additional information did you glean from your findings?	Reflection	Anonymous	My SLO questions are geared towards student understanding of important concepts presented in my class. I am pleased with the number of students who show mastery in the outcomes and this is reflected on my relatively high percentage of students who show mastery in SLO comprehension.	2017-01-10	
What methods of authentic assessment did you employ to determine SLO results for your students?	Reflection	Anonymous	I always ask a specific question on the final exam to determine the mastery of the material in my physical science classes. I select a question that I feel is very important to the students understanding of the material and is one of the listed outcomes on the syllabus. We go over the SLOs for each chapter we go over in class throughout the semester.	2017-01-10	
How might your findings relate to program improvement?	Reflection	Anonymous	There is always room for improvement in finding creative and different ways to reinforce the important outcomes that students should have mastery in throughout the semester. I look for different demonstrations and software that allow me to reinforce the important student outcomes for the semester. When I get to the point during the semester when we discuss in detail a student outcome, I always like to conduct a demonstration or show a short video presentation with practical uses for the understanding of the particular student outcome. I have found this to be very effective and perhaps why so many students show mastery of the presented SLO question on the final exam	2017-01-10	
What professional development activities would assist you in improving your course or program?	Reflection	Anonymous	I do try and take a short summer class to help my mastery in the physical sciences. I also take workshops that help me in presenting important concepts in the fields of geology and chemistry. I think it is very important to continue learning my discipline so that I can improve student's mastery of important concepts in the physical sciences discussed throughout the semester.	2017-01-10	
What types of assistance outside of the classroom would benefit the students in mastery of the SLOs, ie tutoring, workshops, resources in the library, from student services, etc?	New Resources	Anonymous	I believe that the physical sciences need a dedicated tutor particularly with problem solving questions. My limited office hours and students conflicting schedules make it difficult for me to help all of the students on their questions. Many students do form study groups, which is beneficial; however, if there were more options for tutoring then I believe this will benefit all students taking physical science courses. There are numerous resources available for students at the library if they choose to utilize them and I am clear about my expectations for the class and how to utilize these resources.	2017-01-10	

Expected Action	Action Type	Respondent	Action Taken	Date	Resource Request
Please list any additional technology or resources would improve SLO results?	New Resources	Anonymous	I look for different demonstrations and software that allow me to reinforce the important student outcomes for the semester. When I get to the point during the semester when we discuss in detail a student outcome, I always like to conduct a demonstration or show a short video presentation with practical uses for the understanding of the particular student outcome. I have found this to be very effective and perhaps why so many students show mastery of the SLO question presented on the final exam.	2017-01-10	
What types of changes within your course do you think would assist your students in mastery of the SLOs?	Faculty Proposed Actions	Anonymous	I do provide a short list of required outcomes on my syllabus that a student must show proficiency in by the end of the semester. I do reinforce the outcomes the first day of class when I pass out the syllabus, and I continue to come back to these important outcomes throughout the semester. Additionally, in all of my classes, I provide the student with chapter SLOs and these are used as study guides for the mid term and final exam. Students are aware of the need to show mastery in these important concepts to succeed on the exams and therefore in the course.	2017-01-10	
What dialogue do you plan to have regarding your findings?	Faculty Proposed Actions	Anonymous	I discuss the results of my SLOs with my Physical Science Program Review Team during in service week. We discuss our method of assessment and the results of our assessment with the Program Review Team for comments and suggestions. The Program Review Team is very good at creating dialogue about the results of the SLO assessment.	2017-01-10	
SCI >> Chemistry >> CHEM1510 >> Section 22 - Spring 2016					
Briefly describe where your students demonstrated strengths in their learning.	Reflection	Anonymous	Results of the SLO question showed that 19 students demonstrated mastery of the concept and two students met the expectation of the concept out of a total of 22 enrolled students. This is an 86.4 percent proficiency in the SLO presented to them on the final exam. I believe this is a reflection of the students understanding and comprehension of the SLOs presented for the course.	2016-07-26	
Briefly describe where your students demonstrated gaps in their learning.	Reflection	Anonymous	Results of the SLO question showed that three students demonstrated a gap in learning and understanding of the SLO question presented to them on the final exam. Three students did not meet the expectation of an understanding of the SLO presented to them on the final exam.	2016-07-26	
What additional information did you glean from your findings?	Reflection	Anonymous	My SLO questions are geared towards student understanding of important concepts presented in my class. I am very pleased with the number of students who show mastery in the outcomes and this is reflected on my relatively high percentage of students who show comprehension of the question on the final exam.	2016-07-26	
What methods of authentic assessment did you employ to determine SLO results for your students?	Reflection	Anonymous	I always ask a specific question on the final exam to determine the mastery of the SLO in my physical science classes. I select a question that I feel is very important to the students understanding of the material and is one of the listed outcomes on the syllabus. We go over the SLOs for each individual chapter we go over in class throughout the semester.	2016-07-26	
How might your findings relate to program improvement?	Reflection	Anonymous	There is always room for improvement in finding creative and different ways to reinforce the important outcomes that students should have mastery in throughout the semester. I look for different demonstrations and software that allow me to reinforce the important student outcomes for the semester. When I get to the point during the semester when we discuss in detail a student outcome, I always like to conduct a demonstration or show a short video presentation with practical uses for the understanding of the particular student outcome. I have found this to be very effective and perhaps why so many students show mastery of the presented SLO question on the final exam.	2016-07-26	

Expected Action	Action Type	Respondent	Action Taken	Date	Resource Request
What professional development activities would assist you in improving your course or program?	Reflection	Anonymous	I do try and take a short summer class to help my mastery in the physical sciences. I also take workshops that help me in presenting important concepts in the fields of geology and chemistry. I think it is very important to continue learning my discipline so that I can improve student's mastery of important concepts in the physical sciences discussed throughout the semester.	2016-07-26	
What types of assistance outside of the classroom would benefit the students in mastery of the SLOs, ie tutoring, workshops, resources in the library, from student services, etc?	New Resources	Anonymous	I believe that the physical sciences need a dedicated tutor particularly with techniques for problem solving questions. My limited office hours and students conflicting schedules make it difficult for me to help all of the students on their questions. Many students do form study groups, which is beneficial; however, if there were more options for tutoring then I believe this will benefit all students taking physical science courses. There are numerous resources available for students at the library if they choose to utilize them, and I am clear about my expectations for the class and how to utilize these resources.	2016-07-26	
Please list any additional technology or resources would improve SLO results?	New Resources	Anonymous	I look for different demonstrations and software that allow me to reinforce the important student outcomes for the semester. When I get to the point during the semester when we discuss in detail a student outcome, I always like to conduct a demonstration or show a short video presentation with practical uses for the understanding of the particular student outcome. I have found this to be very effective and perhaps why so many students show mastery of the SLO question presented on the final exam.	2016-07-26	
What types of changes within your course do you think would assist your students in mastery of the SLOs?	Faculty Proposed Actions	Anonymous	I do provide a short list of required outcomes on my syllabus that a student must show proficiency in by the end of the semester. I do introduce the outcomes the first day of class when I pass out the syllabus, and I continue to come back to these important outcomes throughout the semester. Additionally, in all of my classes, I provide the student with individual chapter SLOs and these are used as study guides for the mid term and final exam. Students are aware of the need to show mastery in these important concepts to succeed on the exams and therefore in the course.	2016-07-26	
What dialogue do you plan to have regarding your findings?	Faculty Proposed Actions	Anonymous	I discuss the results of my SLOs with my Physical Science Program Review Team during in service week. We discuss our method of assessment and the results of our assessment and go over any particular areas of improvement and provide suggestions. The Program Review Team is very good at creating dialogue amongst ourselves about the results of the SLO assessment.	2016-07-26	
SCI >> Chemistry >> CHEM1510 >> Section 23 - Fall 2016					
Briefly describe where your students demonstrated strengths in their learning.	Reflection	Anonymous	Results of the SLO question showed that nine students demonstrated mastery of the concept and eight students met the expectation of the concept out of a total of 21 enrolled students. This is an 81.0 percent proficiency in the SLO presented to them on the final exam. I believe this a reflection of the students understanding and comprehension of the SLOs presented for the course.	2017-01-10	
Briefly describe where your students demonstrated gaps in their learning.	Reflection	Anonymous	Results of the SLO question showed that three students demonstrated a gap in learning and understanding of the SLO question presented to them on the final exam. One student out of the 21 enrolled students did not participate in the final exam and therefore were not gauged in the assessment. These two students did not meet the expectations of an understanding of the SLO presented to them on the final exam.	2017-01-10	
What additional information did you glean from your findings?	Reflection	Anonymous	My SLO questions are geared towards student understanding of important concepts presented in my class. I am pleased with the number of students who show mastery in the outcomes and this is reflected on my relatively high percentage of students who show mastery in SLO comprehension.	2017-01-10	

Expected Action	Action Type	Respondent	Action Taken	Date	Resource Request
What methods of authentic assessment did you employ to determine SLO results for your students?	Reflection	Anonymous	I always ask a specific question on the final exam to determine the mastery of the material in my physical science classes. I select a question that I feel is very important to the students understanding of the material and is one of the listed outcomes on the syllabus. We go over the SLOs for each chapter we go over in class throughout the semester.	2017-01-10	
How might your findings relate to program improvement?	Reflection	Anonymous	There is always room for improvement in finding creative and different ways to reinforce the important outcomes that students should have mastery in throughout the semester. I look for different demonstrations and software that allow me to reinforce the important student outcomes for the semester. When I get to the point during the semester when we discuss in detail a student outcome, I always like to conduct a demonstration or show a short video presentation with practical uses for the understanding of the particular student outcome. I have found this to be very effective and perhaps why so many students show mastery of the presented SLO question on the final exam	2017-01-10	
What professional development activities would assist you in improving your course or program?	Reflection	Anonymous	I do try and take a short summer class to help my mastery in the physical sciences. I also take workshops that help me in presenting important concepts in the fields of geology and chemistry. I think it is very important to continue learning my discipline so that I can improve student's mastery of important concepts in the physical sciences discussed throughout the semester.	2017-01-10	
What types of assistance outside of the classroom would benefit the students in mastery of the SLOs, ie tutoring, workshops, resources in the library, from student services, etc?	New Resources	Anonymous	I believe that the physical sciences need a dedicated tutor particularly with problem solving questions. My limited office hours and students conflicting schedules make it difficult for me to help all of the students on their questions. Many students do form study groups, which is beneficial; however, if there were more options for tutoring then I believe this will benefit all students taking physical science courses. There are numerous resources available for students at the library if they choose to utilize them and I am clear about my expectations for the class and how to utilize these resources.	2017-01-10	
Please list any additional technology or resources would improve SLO results?	New Resources	Anonymous	I look for different demonstrations and software that allow me to reinforce the important student outcomes for the semester. When I get to the point during the semester when we discuss in detail a student outcome, I always like to conduct a demonstration or show a short video presentation with practical uses for the understanding of the particular student outcome. I have found this to be very effective and perhaps why so many students show mastery of the SLO question presented on the final exam.	2017-01-10	
What types of changes within your course do you think would assist your students in mastery of the SLOs?	Faculty Proposed Actions	Anonymous	I do provide a short list of required outcomes on my syllabus that a student must show proficiency in by the end of the semester. I do reinforce the outcomes the first day of class when I pass out the syllabus, and I continue to come back to these important outcomes throughout the semester. Additionally, in all of my classes, I provide the student with chapter SLOs and these are used as study guides for the mid term and final exam. Students are aware of the need to show mastery in these important concepts to succeed on the exams and therefore in the course.	2017-01-10	
What dialogue do you plan to have regarding your findings?	Faculty Proposed Actions	Anonymous	I discuss the results of my SLOs with my Physical Science Program Review Team during in service week. We discuss our method of assessment and the results of our assessment with the Program Review Team for comments and suggestions. The Program Review Team is very good at creating dialogue about the results of the SLO assessment.	2017-01-10	

Expected Action	Action Type	Respondent	Action Taken	Date	Resource Request
SCI >> Chemistry >> CHEM1520 >> Section 20 - Spring 2016					
Briefly describe where your students demonstrated strengths in their learning.	Reflection	Anonymous	All students scored 100% in the area of hydrocarbon functional groups.	2016-05-19	
Briefly describe where your students demonstrated gaps in their learning.	Reflection	Anonymous	2 students made errors in classifying the specific functional group of carbonyl carbon containing compounds.	2016-05-19	
What additional information did you glean from your findings?	Reflection	Anonymous	Only more evidence that the curriculum is currently structured in a manner that allows students to be successful in the assessed areas.	2016-05-19	
What methods of authentic assessment did you employ to determine SLO results for your students?	Reflection	Anonymous	Students were given actual molecular structures to evaluate.	2016-05-19	
How might your findings relate to program improvement?	Reflection	Anonymous	Findings such as these, in combination with the multiple evaluations that we undertake outside of SLO assessment, are constantly a part of our program review and planning process.	2016-05-19	
What professional development activities would assist you in improving your course or program?	Reflection	Anonymous	Nothing specific at this time.	2016-05-19	
What types of assistance outside of the classroom would benefit the students in mastery of the SLOs, ie tutoring, workshops, resources in the library, from student services, etc?	New Resources	Anonymous	None at this time for these SLOs	2016-05-19	
Please list any additional technology or resources would improve SLO results?	New Resources	Anonymous	None at this time.	2016-05-19	
What types of changes within your course do you think would assist your students in mastery of the SLOs?	Faculty Proposed Actions	Anonymous	Even students that received failing grades in the course showed mastery of these SLOs. Only two students showed minor difficulty in one of the assessed areas. No changes are needed at this time.	2016-05-19	
What dialogue do you plan to have regarding your findings?	Faculty Proposed Actions	Anonymous	We will have casual dialogue between our three faculty member department this week, and will have formal documented discussions as normal part of program review.	2016-05-19	
SCI >> Chemistry >> CHEM1520 >> Section 21 - Fall 2016					
Briefly describe where your students demonstrated strengths in their learning.	Reflection	Anonymous	17 Students did a great job of determining functional group, as well as the identity, location and number of substituent groups in organic compounds.	2016-12-16	
Briefly describe where your students demonstrated gaps in their learning.	Reflection	Anonymous	3 students seemed to have difficulty with all parts of this process.	2016-12-16	
What additional information did you glean from your findings?	Reflection	Anonymous	None	2016-12-16	
What methods of authentic assessment did you employ to determine SLO results for your students?	Reflection	Anonymous	Students were actually given structures of organic compounds and asked to name them according to IUPAC nomenclature rules.	2016-12-16	
How might your findings relate to program improvement?	Reflection	Anonymous	The afore mentioned homework solution videos may enable students more learning opportunities at their convenience outside of class. This in turn may lead to a higher success rate for this course and program.	2016-12-16	
What professional development activities would assist you in improving your course or program?	Reflection	Anonymous	Continued instructional technology activities during the may inservice.	2016-12-16	

Expected Action	Action Type	Respondent	Action Taken	Date	Resource Request
What types of assistance outside of the classroom would benefit the students in mastery of the SLOs, ie tutoring, workshops, resources in the library, from student services, etc?	New Resources	Anonymous	I think creating homework solution videos for this course, as I have done with all of my other courses, could assist students.	2016-12-16	
Please list any additional technology or resources would improve SLO results?	New Resources	Anonymous	Continued funding for video closed captions so more online resources can be developed.	2016-12-16	
What types of changes within your course do you think would assist your students in mastery of the SLOs?	Faculty Proposed Actions	Anonymous	With 85% of students demonstrating mastery of this SLO, I don't believe change is warranted at this time.	2016-12-16	
What dialogue do you plan to have regarding your findings?	Faculty Proposed Actions	Anonymous	I have already had dialog with the other two physical science faculty, and will have more dialog during in service as part of program review.	2016-12-16	
SCI >> Chemistry >> CHEM2211 >> Section 20 - Fall 2016					
Briefly describe where your students demonstrated strengths in their learning.	Reflection	Anonymous	91 % of students did a great job of determining the central atom, the correct number of sigma and pi bonds, and the number of nonbonding electrons.	2016-12-16	
Briefly describe where your students demonstrated gaps in their learning.	Reflection	Anonymous	8 percent of students failed to identify the overall charge on the polyatomic ion.	2016-12-16	
What additional information did you glean from your findings?	Reflection	Anonymous	None	2016-12-16	
What methods of authentic assessment did you employ to determine SLO results for your students?	Reflection	Anonymous	Students were actually given the molecular formula of a polyatomic ion and were asked to provide its Lewis structure.	2016-12-16	
How might your findings relate to program improvement?	Reflection	Anonymous	At this time, data suggest that no improvement is needed in this specific area. Even students that failed the course as a whole demonstrated mastery of this concept.	2016-12-16	
What professional development activities would assist you in improving your course or program?	Reflection	Anonymous	Continued instructional technology activities during the may inservice.	2016-12-16	
What types of assistance outside of the classroom would benefit the students in mastery of the SLOs, ie tutoring, workshops, resources in the library, from student services, etc?	New Resources	Anonymous	Content specific tutors are always beneficial in this type of course.	2016-12-16	
Please list any additional technology or resources would improve SLO results?	New Resources	Anonymous	None.	2016-12-16	
What types of changes within your course do you think would assist your students in mastery of the SLOs?	Faculty Proposed Actions	Anonymous	None at this time. 91% of students demonstrated mastery.	2016-12-16	
What dialogue do you plan to have regarding your findings?	Faculty Proposed Actions	Anonymous	I have already had dialog with the other two physical science faculty, and will have more dialog during in service as part of program review.	2016-12-16	
SCI >> Chemistry >> CHEM2211 >> Section 20 - Spring 2016					
Briefly describe where your students demonstrated strengths in their learning.	Reflection	Anonymous	The vast majority of students were able to calculate molar masses and drive the correct stoichiometric factor in determining the amount of product.	2016-05-19	
Briefly describe where your students demonstrated gaps in their learning.	Reflection	Anonymous	three students made errors in determining molar masses of compounds.	2016-05-19	
What additional information did you glean from your findings?	Reflection	Anonymous	None at this time.	2016-05-19	

Expected Action	Action Type	Respondent	Action Taken	Date	Resource Request
What methods of authentic assessment did you employ to determine SLO results for your students?	Reflection	Anonymous	Students were given a real world scenario with data. Perform stiochiometry is an extremely fundamental aspect of chemistry.	2016-05-19	
How might your findings relate to program improvement?	Reflection	Anonymous	Findings such as these, in combination with the multiple evaluations that we undertake outside of SLO assessment, are constantly a part of our program review and planning process.	2016-05-19	
What professional development activities would assist you in improving your course or program?	Reflection	Anonymous	None at this time.	2016-05-19	
What types of assistance outside of the classroom would benefit the students in mastery of the SLOs, ie tutoring, workshops, resources in the library, from student services, etc?	New Resources	Anonymous	Subject specific tutors with course content mastery are always needed.	2016-05-19	
Please list any additional technology or resources would improve SLO results?	New Resources	Anonymous	None at this time.	2016-05-19	
What types of changes within your course do you think would assist your students in mastery of the SLOs?	Faculty Proposed Actions	Anonymous	We spend one full week in lab, and a week and a half in lecture on these topics. Even some students that received failing grades in the course showed mastery of these SLOs. No changes are needed at this time.	2016-05-19	
What dialogue do you plan to have regarding your findings?	Faculty Proposed Actions	Anonymous	We will have casual dialogue between our three faculty member department this week, and will have formal documented discussions as normal part of program review.	2016-05-19	
SCI >> Chemistry >> CHEM2212 >> Section 20 - Fall 2016					
Briefly describe where your students demonstrated strengths in their learning.	Reflection	Anonymous	100% of students were able to correctly set up the amounts table, and most were able to set up the equilibrium constant expression.	2016-12-16	
Briefly describe where your students demonstrated gaps in their learning.	Reflection	Anonymous	A few students had difficulty determining that the equilibrium constant value indicated that the concentration minus x term could not be approximated, and therefore should have been calculated.	2016-12-16	
What additional information did you glean from your findings?	Reflection	Anonymous	I am beginning to wonder if it is the assessment itself that needs modification. I will look at this before assessing the same SLO next semester.	2016-12-16	
What methods of authentic assessment did you employ to determine SLO results for your students?	Reflection	Anonymous	Students were provided with a balanced chemical equation, initial concentrations of reactants, and an equilibrium constant. From this, they were required to calculate the equilibrium concentration of a product.	2016-12-16	
How might your findings relate to program improvement?	Reflection	Anonymous	As stated above, I will have more dialogue with colleagues, and evaluate the assessment tool itself. I am currently using a rather complex evaluation instrument buried as the 53rd question in a final exam.	2016-12-16	
What professional development activities would assist you in improving your course or program?	Reflection	Anonymous	Continued instructional technology activities during the may inservice.	2016-12-16	
What types of assistance outside of the classroom would benefit the students in mastery of the SLOs, ie tutoring, workshops, resources in the library, from student services, etc?	New Resources	Anonymous	Content specific tutors are always beneficial in this type of course.	2016-12-16	
Please list any additional technology or resources would improve SLO results?	New Resources	Anonymous	Continued funding for video closed captions so more online resources can be developed.	2016-12-16	
What types of changes within your course do you think would assist your students in mastery of the SLOs?	Faculty Proposed Actions	Anonymous	I need more data. This is a significantly complex 5 step problem solving process. All students did major portions correctly, but I only had 8 students to assess.	2016-12-16	

Expected Action	Action Type	Respondent	Action Taken	Date	Resource Request
What dialogue do you plan to have regarding your findings?	Faculty Proposed Actions	Anonymous	I have already had dialog with the other two physical science faculty, and will have more dialog during in service as part of program review.	2016-12-16	
SCI >> Chemistry >> CHEM2212 >> Section 20 - Spring 2016					
Briefly describe where your students demonstrated strengths in their learning.	Reflection	Anonymous	All but three students were able to accurately determine the appropriate overall rate law equation from the data provided.	2016-05-19	
Briefly describe where your students demonstrated gaps in their learning.	Reflection	Anonymous	Three students failed to realize from the data provided that the reaction was second order in nitrogen monoxide, and therefore its concentration needed to be squared in the rate law equation.  Additionally, two students performing very well on the rest of the final exam attacked this problem from an equilibrium approach instead of a kinetics approach.	2016-05-19	
What additional information did you glean from your findings?	Reflection	Anonymous	none.	2016-05-19	
What methods of authentic assessment did you employ to determine SLO results for your students?	Reflection	Anonymous	Students were provided with real world concentration, time, temperature and rate data from a series of reactions. From this they had to derive the rate law and calculate the rate of a chemical reaction.	2016-05-19	
How might your findings relate to program improvement?	Reflection	Anonymous	Findings such as these, in combination with the multiple evaluations that we undertake outside of SLO assessment, are constantly a part of our program review and planning process.	2016-05-19	
What professional development activities would assist you in improving your course or program?	Reflection	Anonymous	None at this time.	2016-05-19	
What types of assistance outside of the classroom would benefit the students in mastery of the SLOs, ie tutoring, workshops, resources in the library, from student services, etc?	New Resources	Anonymous	Subject specific tutors with content mastery available at times when students are not in class are always needed in these challenging STEM courses.	2016-05-19	
Please list any additional technology or resources would improve SLO results?	New Resources	Anonymous	None at this time.	2016-05-19	
What types of changes within your course do you think would assist your students in mastery of the SLOs?	Faculty Proposed Actions	Anonymous	A VAST amount of material is covered in this comprehensive final exam for the one year sequence in general chemistry. I think a bit more time in the review outlining the basic differences between kinetics and equilibria may be beneficial.	2016-05-19	
What dialogue do you plan to have regarding your findings?	Faculty Proposed Actions	Anonymous	We will have casual dialogue between our three faculty member department this week, and will have formal documented discussions as normal part of program review.	2016-05-19	