Assessment Impact by Course Objectives Palau Community College

Program (ES) - Environmental Marine Science

Program (ES) - Environmental Marine Science

CLO: SC 119 - Introduction to Physical Science: CLO 1

SCIENTIFIC INQUIRY: Students will be able to develop abilities that are necessary to properly conduct scientific investigations, gather and analyze data, and present findings in a formal written report.

CLO Assessment Cycle: 2014-2015 (Fall 2014)

Means of Assessment			
Expected Student Performance	Notes	Active	
70% of the students assessed will perform at the proficiency level.		Yes	
	Expected Student Performance 70% of the students assessed will perform at	Expected Student Performance Notes 70% of the students assessed will perform at	

Results			
Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
Lab Journal - 12/16/2015 - 75% of the students assessed performed at the proficiency level Expected Student Performance Met: Yes Related Documents: CLO1n5_Rating1.pdf CLO1n5_Rating2.pdf CLO1n5_Rating3.pdf CLO1n5_Rating4.pdf	12/17/2015 - There was no change in student proficiency level. The only obvious difference between this year and last year's assessment for CLO #1 is the percentage of enrollment included in the assessment. Students who are included in assessment are those who completed over 50% of the required lab reports. Last year, 2/3 of the enrolled students were included in the assessment, however this year, only 50% were included. It might be worth exploring the possibility of correlation between absences and lack of student completion of the signature assignment. If a correlation is confirmed, maybe attendance policy should be reinstated. Another possible contributing factor leading that resulted in lower number of students completing signature assignment could be the acceleration of the second half of the semester due to instructor's three-week medical absence. The contents of 8 weeks were condensed into a period of 4 weeks and the pace may have been too fast. Students were just not given enough time to absorb contents and lab investigations may have been completed but students' did not have enough time to process, analyze, and link different concepts. RECOMMENDATION: There should be a system in place to find substitute instructors when fulltime faculty becomes ill and requires more than 3 days of sick leave from work. Another		2015-2016 (Fall 2015)

	Results		
Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
	possible solution is to hire a fulltime assistant science instructor to balance out workload and serve as a substitute science instructor in the event that one or both of the two fulltime instructors become ill, as experienced this semester. 12/16/2015 - There was no change in proficiency ratings when comparing this year with 2014. The only obvious difference is that percentage of enrollment included in the assessment. In 2014, two third of the enrollment was included in assessment, while this year, only 50% was assessed. It might be worthwhile to explore the possibility of correlating student performance and proficiency with absences. If there is, then maybe the attendance policy should be reinstated. Another factor that may have caused 50% of the enrollment to not complete the key assignment may be due to the accelerated course during the last four weeks of semester to make up missed contact hour when instructor was ill for three weeks. During this period, the contents of the last 8 weeks of this semester were condensed into a 4 weeks period. The pace may have been too fast and students were not able to retain and really grasp the concepts investigated in labs resulting in missing numerous lab reports.	y r rs	
Lab Journal - 12/23/2014 - 70% of the students assessed performed at the proficiency level. Expected Student Performance Met: Yes Related Documents:	12/23/2014 - No action needed at this time as the expected outcome has been met.		2014 - 2015 (Fall 2014)
CLO 1n5.pdf			

SCIENTIFIC MEASUREMENTS: Student is skilled in acquiring quantitative data from laboratory and field procedures to describe dimensional objects or events.

CLO Assessment Cycle: 2014-2015 (Fall 2014)

Means of Assessment			
Means of Assessment	Expected Student Performance	Notes	Active
Acquiring quantitative data from laboratory and field procedures to describe dimensional objects or events.		signature assignment is changed to midterm and final exam for fall 2015	Yes
Signature assignment:			
Midterm Exam			

Means of Assessment			
Means of Assessment	Expected Student Performance	Notes	Active
Students are able to collect quantitative data from laboratory and field procedures to describe dimensional objects or events.	70% of the students assessed will perform at the proficiency level.	This signature assignment started being used Fall 2015.	Yes
Signature assignment:			
Final Exam			

	Results		
Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
Final Exam - 12/18/2015 - 91% of the students assessed performed at the proficiency level. Expected Student Performance Met: Yes	12/18/2015 - No action needed at this time as the expected outcome has been met.		2015-2016 (Fall 2015)
Related Documents: CLO2_3_4_Rate2_2_2.PDF CLO2_3_4_Rate3_3_2.PDF CLO2_3_4_Rate4_4_3.PDF			
Midterm Exam - 12/18/2015 - 91% of the students assessed performed at the proficiency level Expected Student Performance Met: Yes	12/18/2015 - Assessment results increased by 21% from 2014. No action needed at this time as the expected outcome has been met.		2015-2016 (Fall 2015)
Related Documents: CLO2_3_4_Rate2_2_2.PDF CLO2_3_4_Rate3_3_2.PDF CLO2_3_4_Rate4_4_3.PDF			
Midterm Exam - 12/23/2014 - 75% of the students assessed performed at the proficiency level.	12/23/2014 - No action needed at this time as the expected outcome has been met.		2014 - 2015 (Fall 2014)
Expected Student Performance Met: Yes Related Documents:			
CLO 2			

SCIENTIFIC KNOWLEDGE: Student analyzes and applies concepts of forces and motion, energy and work, temperature and heat, waves, electricity and magnetism; demonstrate knowledge of the nature of matter, its properties, and interactions; demonstrates knowledge of the processes that shape the universe and our planet earth.

CLO Assessment Cycle: 2014-2015 (Fall 2014)

Means of Assessment			
Means of Assessment	Expected Student Performance	Notes	Active
Analyzes and applies concepts of forces and motion, energy and work, temperature and heat, waves, electricity and magnetism.	70% of the students assessed will perform at the proficiency level.		Yes
Signature assignment:			
Midterm Exam			

Means of Assessment			
Means of Assessment	Expected Student Performance	Notes	Active
Demonstrate knowledge of the nature of matter, its properties, and interactions; demonstrates knowledge of the processes that shape the universe and our planet earth. Signature assignment: Final Exam	70% of the students assessed will perform at the proficiency level.		Yes

Results			
Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
Final Exam - 12/17/2015 - 82% of the students assessed performed at the proficiency level Expected Student Performance Met: Yes	12/17/2015 - Assessment results increased by 4% this year. No action needed at this time as the expected outcome has been met.		2015-2016 (Fall 2015)
Related Documents: CLO2_3_4_Rate2_2_2.PDF CLO2_3_4_Rate3_3_2.PDF CLO2_3_4_Rate4_4_3.PDF			
Midterm Exam - 12/16/2015 - 82% of the students assessed performed at the proficiency level Expected Student Performance Met: Yes Related Documents: CLO2_3_4_Rate2_2_2.PDF CLO2_3_4_Rate3_3_2.PDF CLO2_3_4_Rate4_4_3.PDF	12/16/2015 - Assessment is based on performance of 10 students. Students excluded from assessment were those who requested for incomplete grades, and those who did not complete the midterm and/or final exams. Results of this year's assessment increased by 4% from last year, thus no action is needed as this time.		2015-2016 (Fall 2015)
Final Exam - 12/23/2014 - 70% of students assessed performed at the proficiency level Expected Student Performance Met: Yes Related Documents: Final Exam Evidence	04/14/2015 - No action needed at this time as the expected outcome has been met.		2014 - 2015 (Fall 2014)
Midterm Exam - 12/23/2014 - 70% of the students assessed performed at the proficiency level. Expected Student Performance Met: Yes Related Documents: CLO 3.pdf	04/14/2015 - No action needed at this time as the expected outcome has been met.		2014 - 2015 (Fall 2014)

CRITICAL THINKING: Student demonstrates ability to use process skills, critical thinking, scientific reasoning and strategies to investigate and solve problems in a variety of scientific, technological, environmental and everyday contexts.

CLO Assessment Cycle: 2014-2015 (Fall 2014)

Means of Assessment			
Means of Assessment	Expected Student Performance	Notes	Active

Means of Assessment			
Means of Assessment	Expected Student Performance	Notes	Active
Demonstrates ability to use process skills, critical thinking, scientific reasoning and strategies to investigate and solve problems in a variety of scientific, technological, environmental and everyday contexts. Signature assignment: Midterm Exam	70% of the students assessed will perform at the proficiency level.		Yes
Demonstrates ability to use process skills, critical thinking, scientific reasoning and strategies to investigate and solve problems in a variety of scientific, technological, environmental and everyday contexts. Signature assignment: Final Exam	70% of the students assessed will perform at the proficiency level.		Yes

	Results		
Summary of Data Collected	Use of Results	Follow-Up	Semester Assesse
Final Exam - 12/17/2015 - 64% of the students assessed performed at the proficiency level Expected Student Performance Met: Yes Related Documents: CLO2_3_4_Rate4_4_3.PDF CLO2_3_4_Rate4_4_3.PDF CLO2_3_4_Rate3_3_2.PDF	12/17/2015 - Although the expected outcome was not reached, the proficiency level did increase by almost 20%. Contents of the second part of the semester this Fall semester went into more detail in chemistry. The contents of geology were not covered as the last 8 weeks of instructions were accelerated into 4 weeks due to instructor's sick leave for 3 weeks. As such, it became apparent tha students were challenged with the fast pace and overwhelmed with the amount of assignments that needed to be done in a short period of time.		2015-2016 (Fall 2015)
Midterm Exam - 12/16/2015 - 64% of the students assessed performed at the proficiency level Expected Student Performance Met: No Related Documents: CLO2_3_4_Rate2_2_2.PDF CLO2_3_4_Rate3_3_2.PDF CLO2_3_4_Rate4_4_3.PDF	12/16/2015 - Assessment dropped by 6%. Because instructor got sick, classes and labs were cancelled for three weeks. Contact hours were made up, however, 8 weeks of course contents were accelerated into a period of 4 weeks. The pace may have been too fast and students were not able to complete course assignments that could have better prepared them to take the final exam. It is recommended that a system or policy be put in place to find substitute instructors when a fulltime faculty becomes ill and requires more than 3 days of sick leave from work. Hiring a of a full time instructor assistant for the science program could also help in balancing work loads and serve as a substitute instructor should anyone of the two full time science instructors becomes ill, as was experienced this semester.	y.	2015-2016 (Fall 2015)
Final Exam - 12/23/2014 - 70% of the students assessed performed at the proficiency level. Expected Student Performance Met: Yes	04/14/2015 - No action needed at this time as the expected outcome has been met.		2014 - 2015 (Fall 2014)
Related Documents: Final Exam part 2			

COLLABORATIVE LEARNING: Student demonstrates skills in working in a group with others peers in scientific literature search and experimentation.

CLO Assessment Cycle: 2014-2015 (Fall 2014)

Means of Assessment				
Means of Assessment	Expected Student Performance	Notes	Active	
Demonstrates skills in working in a group with others peers in scientific literature search and experimentation.	70% of the students assessed will perform at the proficiency level.		Yes	
Signature assignment:				
Lab Journal				

Results				
Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed	
Lab Journal - 12/16/2015 - 75% of the students assessed performed at the proficiency level Expected Student Performance Met: Yes	12/16/2015 - This year's results remains the same as 2015. No specific action needed at this time as expected proficiency was met.		2015-2016 (Fall 2015)	
Related Documents: CLO1n5_Rating4.pdf CLO1n5_Rating3.pdf				
Lab Journal - 12/23/2014 - 75% of the students assessed performed at the proficiency level.	04/14/2015 - No action needed at this time as the expected outcome has been met.		2014 - 2015 (Fall 2014)	
Expected Student Performance Met: Yes				
Related Documents: Lab Reports				