

# Santiago Canyon College

Department: Earth, Space and Physical sciences (Chemistry)

Year: 2010

Semester: S10

redol

4/5/11

## Dept Review Sub-report for Sections C – D on SLO Assessment (Chem 219)

1) Outcome to be assessed by dept members	2- Write in scientific terms and provide explanations of observed scientific phenomenon using the language of chemistry.  3- Perform experiments (following proper procedures for safe handling of chemicals) with the given directions, collect valid scientific data, analyze the data and draw conclusions.
2) Means of assessment and criteria of success	As a method of assessment, we should use laboratory reports as a way to assess both #2 and #3 in SLOs. A full laboratory report of experiment #9 (Volumetric analysis) will be used to assess these SLOs. A rubric will be used to standardize grading of the lab report and help identify the features we are looking for in students' performance.  The students are asked to perform the volumetric analysis experiment over 3 laboratory periods. Directions to perform the experiment are given in the laboratory manual but there are no directions to how to collect data, how and what to record and no directions are given to how to perform calculations and draw conclusions.
3) Summary of data collected	No of students assessed = 30 students  No of sections = 2

	Beginning 1	Developing 2	Accomplished 3	Exemplary 4
Purpose/Problem	-	48%	6%	45%
Procedure	-	6%	10%	84%
Data & Results	3%	6%	23%	65%
Calculations	-	19%	16%	61%
Conclusion	3%	3%	29%	61%
Grammar & Spelling	-	3%	3%	94%
Attractiveness	3%	3%	19%	74%
Timeline	-	-	-	100%

4) Analysis and discussion of data

The purpose of the experiment was not clear in about 50% of the students. Collecting data, performing calculations and writing conclusion are still the weak points in writing laboratory reports.

5) Plan of action/what to do next

As a recommendation to the instructors, the department recommends stressing how to organize data in a table, analyze the data and how to draw valid conclusions.