

# Santiago Canyon College

Department: Earth, Space and Physical sciences (Chemistry)

Year: 2008

Semester: S08

## 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 you 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 is 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 = 50 students  No of sections = 3

	Beginning 1	Developing 2	Accomplished 3	Exemplary 4
Purpose/Problem	12%	40%	12%	36%
Procedure	0%	4%	6%	90%
Data & Results	12%	8%	18%	62%
Calculations	4%	12%	14%	70%
Conclusion	14%	12%	16%	58%
Grammar & Spelling	0%	2%	4%	94%
Attractiveness	0%	12%	30%	58%
Timeline	0%	2%	2%	94%

4) Analysis and discussion of data

In the items regarding procedure, grammar and time line, more than 90% of the students scored exemplary. In terms of attractiveness, 58% of the students had exemplary reports where 30 % were accomplished.

The items we need to work on in writing laboratory reports are conclusion, data tables and calculations.

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.