Chemistry Department Assessment of GE Learning Outcome 1e

Learning Outcome: GELO 1e. Quantitative Reasoning: Students will be able to solve problems that are quantitative in nature.

Outcome Measure: Problems on the final exam that are quantitative in nature.
CHE101 Chemistry and Society
CHE103 Introduction to General, Organic, and Biological Chemistry
CHE152 General Chemistry I
PSC110 Physical Science (chemistry portion)

Criteria for Success: At least 70% of students will score 3 or higher.

Longitudinal Data:

Course	Semester	N	% students score = 4	% students score = 3	% students score = 2	% students score = 1
CHE101	Spring 2015	22	45.5%	31.8%	13.6%	9.1%
CHE103	Fall 2014	26	73.1%	23.1%	3.8%	0%
CHE103	Spring 2015	16	50.0%	18.8%	25.0%	6.3%
CHE152	Fall 2014	40	50.0%	30.0%	12.5%	7.5%
PSC110	Fall 2014	22	40.9%	22.7%	13.6%	22.7%
PSC110	Spring 2015	22	45.5%	22.7%	22.7%	9.1%

Course	Semester	N	% students score 3 or higher
CHE101	Spring 2015	22	77.3%
CHE103	Fall 2014	26	96.2%
CHE103	Spring 2015	16	68.8%
CHE152	Fall 2014	40	80.0%
PSC110	Fall 2014	22	63.6%
PSC110	Spring 2015	22	68.2%

Conclusions Drawn from Data: All of the students who were assessed were a random sampling from one or more sections of each course except for CHE103 Spring 2015 which assessed the entire class. In future years, we expect to have a larger number of students in CHE103 during the spring semester. The fall will mainly consist of pre-Nursing students and the spring will mainly consist of Kinesiology students. The criteria for success were met in three out of six of our GE courses last year. Two courses were just below the 70% mark at 68.8% and 68.2%. PSC110 Fall 2014 was lower at 63.6%. It is difficult to make conclusions without longitudinal data over a few years.

Changes to be Made Based on Data: We will keep an eye on the performance in PSC110 in future years to determine if quantitative reasoning needs to be further developed in this course.

Rubric Used : The following scale will be used.

	4	3	2	1
% of points earned on quantitative problems	80 – 100%	60 – 79%	40 – 59%	39% or lower