

Physical Science Department

Student Learning Assessment

Course: Chemistry 121 (Basic Chemistry) Semester: Fall 2012

Course Coordinator: Dr. Maria Valentino Number of Students: 245

Assessment Instrument Description

The Exit Exam consisted of 40 multiple-choice questions (a-e) that covered the Chemistry 121 Student Learning Outcomes (SLO's). Students were informed that 20 (or more) of the 40 questions must be correctly answered to pass the Exit Exam.

Exit Exam Analysis

Range of Scores Possible: 0 – 40 (0% - 100%)
Range of Scores Achieved: 10 – 40 (25% - 100%)

Average Score: 28/40 (70%)
Passing Score: 20/40 (50%)

Number of Students Achieving the Passing Score: 220/245 (89.8%)
Number of Students Not Achieving the Benchmark Score: 25/245 (10.2%)

Low-Scoring Questions

Of the 40 questions chosen, 5 questions were answered incorrectly by the majority (50% or more) of the students. These questions and the corresponding topics are shown in the table below.

Question #	Topic	% of Students with Incorrect Responses
3	Calculate amount of energy needed to melt ___ g of a substance.	65
29	Knowledge of the freezing point of water.	51
30	Calculate mass % of a solute.	55
32	$PV=nRT$, calculate V, under STP conditions	52
37	Calculate the molar mass of "bromine gas".	64