

General Education Assessment

Chemistry Program

2013-2014

The assessment procedure involved a quiz based on a recently completed laboratory experiment. Each quiz began with a brief description of the experimental procedure, followed by six multiple choice questions designed to assess six core aspects of chemistry. The quiz was administered to students enrolled in Chemistry101 (General Chemistry I) during the Fall of 2013 and the Spring of 2014.

Table 1: Assessment of CHEM 101

Problem	CHEM 101 Fall 2013 (N = 303) Percent Correct	CHEM 101 Spring 2014 (N = 137) Percent Correct
Experimental control of a variable and experimental error	61.1	54.0
Chemical formula notation	67.7	69.3
Chemical composition and mass relationships	53.1	48.2
Completeness of chemical process	29.4	21.9
Proof of conversion of reactant	44.9	32.1
Concept of limiting reagent	36.0	24.1

Overall, the students showed, as indicated by the correctness of their responses, that they generally understood the scientific principles being questioned.