



UNIVERSITY OF ARKANSAS
PULASKI TECH

Course-Level Assessment Report

Course: ____Chem 1305 General

Chemistry 1 Lecture____

Academic Year: __2020-2021____



1. Name of course: CHEM 1305 General Chemistry 1
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Course-Level Learning Outcomes

1. What are the Course-Level Outcomes (CLOs)?

GC1CLO 1 – Math Concepts & Chemical Nomenclature – Students will utilize measurable properties and apply Metric/American conversions using correct significant figures and scientific notation during calculations. Students will apply the rules of chemical nomenclature as it pertains to bond type.

GC1CLO 2 – Chemical Reactions & Stoichiometry – Students will utilize all aspects of the chemical reaction and apply stoichiometric calculations to predict theoretical yield.

GC1CLO 3 – Gas Behavior & Thermal Energy – Students will utilize all aspects of gas behavior and apply the gas laws to predict amounts involved in gas samples. Students will apply stoichiometry to predict heat flow amounts in a reaction.

GC1CLO 4 – Chemical Bonding & 3D Chemical Structure – Students will predict the 3D-Structure of molecules and ions and describe the bonding within.

2. Which CLOs were addressed for the academic year?

CLOs 1-4 were addressed.

3. Which CLOs are being addressed in your assessment plan in the upcoming academic year?

CLOs 1-4

4. Explain the assessment cycle.

During the previous spring semester, professors meet to discuss the CLOs and assessment needs for the next fall. Modifications to final exam are discussed for the fall.

At the beginning of the fall semester, faculty meet prior to the start of classes to finalize changes in the assessment methods. The results from the previous semesters final exam are addressed. The faculty then meet to discuss the results and any problems in the methods or rubrics. At the end of the semester, results from the final exam are collected and distributed. Prior to the start of the spring semester, the faculty meet again to discuss the previous findings and address any changes that are needed.

5. What are the assessment methods? Are they direct or indirect?

The 70-question final exam was used as direct assessment of the CLOs. The data was obtained by using Item Analysis in Blackboard.

6. What are the assessment goal(s), including benchmarks?

An overall % correct of 70% for each CLO is desired.

7. What were the findings for the academic year?

Spring 2021

	CLO 1	CLO 2	CLO 3	CLO 4
Questions	14	8	17	6
Correct %	86.8	77	76	79

27 student data entries

Fall 2020

	CLO 1	CLO 2	CLO 3	CLO 4
Questions	14	8	17	6
Correct %	83	92	84	77

31 student data entries

8. What is your analysis of the findings?

Overall, we successfully met our goal for each CLO. There were a few sections that noticeably were lower from semester to semester. This may have been caused by the shift in pedagogy and the instructors adjusting to the textbook.

9. What is the action plan for the upcoming academic year?

Explain.

The final will continue to be used as is for another semester. A consistent method of collecting the data from Blackboard will be developed and explained to new faculty teaching this course. A new textbook will need to be chosen to address some confusion caused by the current book. The instructors will also look at incorporating more review assignments in the online textbook.