UNIVERSITY OF ARKANSAS
PULASKI TECH

Assessment Report:
2019-2020:
(CHEM 1103 Fundamental Chemistry I Lab)

1. Name of individual compiling report: Dr. Michael Julian

2. Date of submission: 9/30/2020

3. Is the assessment plan (*Check or highlight one*)

☐ an initial plan for the program ☐ a revision of an old plan ☐ unaltered from previous year

Course-Level Learning Outcomes-

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

1. Students will use instruments, reactants, and techniques correctly and safely.
2. Students will communicate measurements and results with correct units, significant figures, and scientific notation as necessary.
3. Students will apply chemistry concepts to reactions and other processes in the lab setting.

2. Which CLOs were addressed for this academic year? (2019-2020)

CLO 2

3. Which CLOs are being addressed in your assessment plan next academic year? (2020-2021)

CLO 2

4. Explain the assessment cycle.

During the previous spring semester, professors meet to discuss the CLOs and assessment needs for the next fall. At the beginning of the fall semester, faculty meet prior to the start of classes to finalize changes in the assessment methods. As the lab data is collected, the totals are shared via email among the faculty. The faculty then

meet to discuss the results and any problems in the methods or rubrics. At the end of the semester, results are 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 students' performance on the identification of an unknown liquid is analyzed. This gives a direct measurement of their performance for CLO 2.

6. What are the assessment goal(s)?

We should have 70% of students achieve "Exceeds Expectations" or "Meets Expectations" for our lab rubric.

7. What were the findings for this academic year? (2019-2020)

Fall 2019 Data collected for 87 Students:

Exceeds Expectations	Meets Expectations	Does Not Meet Expectations
60.9%	14.9%	24.1%

Spring 2020 Data collected for 83 Students:

Exceeds Expectations	Meets Expectations	Does Not Meet Expectations
55.4%	22.9%	21.7%

8. What is your analysis of the findings?

We had some difficulty collecting the data as the lab course was separated from the lecture for the first-time during Fall 2019. The data met our requirements, but pointed to a disparity between the students who really put forth the effort on their lab report and those that did not. We also had some difficulty with lab equipment. We were able to purchase new balances for one of the labs that allowed us to better collect data for those students. During the spring semester, the switch to completely online learning and campus shutdown occurred during

the week of the lab being assessed. Less than half of the sections were able to attend class and generate data before the switch to virtual learning. The students who completed the lab had less students exceed expectations.

9. What is the action plan for the next academic year? (2020-2021) Explain.

This year will be built around the HYFLEX model. This will cause all labs to be taught in person and virtual. Thus, we will attempt to grade the data through blackboard submissions. This will make our collection of data for this assessment a lot more time consuming. We will attempt to make it work during the fall, with the potential for a new assessment being discussed in the spring.