2025– 26 Alternative Delivery Executive Summary

Submit to the BlackBoard Assessment Site.

Department: Natural Science **Date:** 6/17/2026 **Course(s):** Chem 115

Alternative Format(s) – **select as many as are applicable: Dual Credit** **Select** **Select**

Members (must include more than course instructor only) **involved with analysis of artifacts:**

See Alternative Delivery Assessment Plan for:
a) Course requirement evaluation; b) Student Outcome; c) Question(s); e) Methodology

Analysis of artifacts:
1). Student Outcome*: **PERFORMANCE CRITERIA*** *- How was data analyzed? (attach rubrics/scoring tools if used).* The scores on the multiple-choice American Chemical Society (ACS) First Semester General Chemistry final exam were gathered from all instructors and averaged separately for the on-campus and Dual Credit students.

2). **COMPARABILITY** – *How did you determine if the outcomes of the traditional and alternative delivery modes were comparable?* (note "na" if delivery modes were not compared). If the average scores are similar between the Dual Credit and on-campus students, or if the Dual Credit students outperform the on-campus students, the outcomes are considered to be comparable.

Summary of RESULTS*:
1). Restate the assessment question(s) (from the Assessment plan): Are students able to understand and apply the general principles of chemistry?
2). Summarize the assessment results. A narrative summary is required. Charts, tables or graphs are encouraged but optional. The historical average score for on-campus students is 36.3 points, with a standard deviation of 12.5 points. The Dual Credit student scores, on average, exceed the on-campus CUNE students, with an overall average score of 42.0 and a standard deviation of 10.6 for a total of 80 Dual Credit students. The individual school averages were 33.0, 35.4, 43.9, 44.2, 46.8, and 51.3 points. Two schools did not outperform the on-campus students, but the difference between the lower-scoring schools and the on-campus students was not statistically significant.
*3). **INTERPRETATION*** *- Discuss how the results answer the assessment question(s).* The national average score on this version of the ACS exam is 40.73 points out of 70, with a standard deviation of 11.11 points. This year, the Dual Credit average score was above the national norms. The Dual Credit student scores, on average, exceed the on-campus CUNE students. The school with the lowest average score did not outperform the on-campus CUNE students; however, this school was in its first year offering Chem 115 Dual Credit, and the students had some additional upheaval with an instructor change partway through the year. Thus, a lower-than-expected score is understandable. This school's scores will be monitored for improvement in the coming years.
4). Observations made that were not directly related to the question(s). (*i.e. interrater reliability of the scoring tool was low*)

5). ***How did the outcomes of the traditional and alternative format analysis compare*?** The Dual Credit scores were higher than the on-campus scores, on average.

Sharing of Results: *When were results shared? Date:* June 17, 2026 *How were the results shared? (i.e. met as a department)* via email *Who were results shared with? (List names):* Robert Hermann, Raegan Skelton

Discussion of Results –**Summarize your conclusions including:**

1. **ACTION*-** *How will what was learned from the assessment impact the alternative format teaching of this course starting the next academic year?* The Dual Credit instructors have been successful in teaching their students the general principles of chemistry. No adjustment will be imposed on the Dual Credit instructors.
2. **IMPACT*-** *What is the anticipated impact of the* **ACTION*** *on student achievement of the learning outcome in the next academic year?* We expect the outcome to be similar next year.

3. **BUDGET IMPLICATIONS** – *Indicate budget requirements necessary for the successful implementation of the* **ACTION*** (i.e. an additional staff person, new equipment, additional sections of a course).

Submitted by: Kristy Jurchen **Assessment Committee Reviewed (date):** 6/22/26

Submitter notified approval/additional action needed: 6/22/26

BUDGET IMPLICATIONS – **Assessment Committee Chair notified appropriate Dean:** na