

2018– 19 Alternative Delivery Executive Summary

Submit to the BlackBoard Assessment Site.

Department: Natural and Computer Science	Date: 7/1/2019	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: Kristy Jurchen, Robert Hermann		
Alternative Delivery Assessment Plan for: a) <i>Course requirement evaluation;</i> b) <i>Student Outcome;</i> c) <i>Question(s);</i> e) <i>Methodology</i>		
Analysis of artifacts: 1). Student Outcome: PERFORMANCE CRITERIA * - <i>How was data analyzed? (attach rubrics/scoring tools if used).</i> 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 – <i>How did you determine if the outcomes of the traditional and alternative deliver modes were comparable? (note “na” if delivery modes were not compared).</i> 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). <i>Restate the assessment question(s) (from the Assessment plan):</i> Are students able to understand and apply the general principles of chemistry? 2). <i>Summarize the assessment results. A narrative summary is required. Charts, tables or graphs are encouraged but optional.</i> The average final exam score for the on-campus students during the 2018-19 school year was 39.0 points with a standard deviation of 12.6 points. The average score for all Dual Credit students was 44.4 points, with a standard deviation of 11.8 points. Five of the schools outperformed the on-campus students, with class averages of 40.1, 45.8, 46.4, 54.2, and 57.3 points. Two of the schools did not outperform the on-campus students, with class averages of 37.8 and 28.7 points. The difference between the school with a 28.7 average and the on-campus students was statistically significant ($p < 0.05$). 3). INTERPRETATION * - <i>Discuss how the results answer the assessment question(s).</i> The national average score on this version of the ACS exam is 40.73 points, with a standard deviation of 11.11 points. The Dual Credit student scores, on average, exceed both the on-campus CUNE students and the national average. The Dual Credit students are able to understand and apply the general principles of chemistry as well as the average General Chemistry student in the nation. 4). <i>Observations made that were not directly related to the question(s). (i.e. interrater reliability of the scoring tool was low)</i> The school that performed significantly worse than the CUNE students had a very small class, 7 students, where unusually low-performing students can easily skew the class average. Two of those students performed particularly poorly. This school did not perform significantly worse than the CUNE students last year. We will continue to monitor this school's performance in future years to see whether it improves. 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: <i>When were results shared? Date:</i> July 1, 2019 <i>How were the results shared? (i.e. met as a department)</i> via email <i>Who were results shared with? (List names):</i> Robert Hermann, Kyle Johnson, Jennifer Freund		
Discussion of Results –Summarize your conclusions including: 1. ACTION *- <i>How will what was learned from the assessment impact the alternative format teaching of this course starting the next academic year?</i> 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. The schools that performed significantly worse than the on-campus students will be monitored to see if their scores improve with further teacher experience, and we will seek opportunities to meet with that instructor. 2. IMPACT *- <i>What is the anticipated impact of the ACTION* on student achievement of the learning outcome in the next academic year?</i> We expect the outcome to be similar next year. 3. BUDGET IMPLICATIONS – <i>Indicate budget requirements necessary for the successful implementation of the ACTION*</i> (i.e. an additional staff person, new equipment, additional sections of a course).		
Submitted by: Kristy Jurchen Assessment Committee Reviewed (date): 7/16/19		
Submitter notified approval/additional action needed: approved		

BUDGET IMPLICATIONS – Assessment Committee Chair notified appropriate Dean: na