2025-26 Alternative Delivery Executive Summary

Submit to the BlackBoard Assessment Site.

Department: Mathematics and Computer Science **Date:** 6/15/26 **Course(s):** Math 186
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:** Brian Albright

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).* Students were given 10 questions involving techniques of integration. Each student's score was his or her number of correct or consistent questions out of 10.
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). The traditional students and the Dual Credit students taking the exam were treated as two random samples, and a t-test was used to test the claim that the Dual Credit students come from a population whose average score is at least as high as the average score of the population from which the traditional students come.

Summary of RESULTS*:
1). Restate the assessment question(s) (from the Assessment plan): Can students apply techniques of integration?
2). Summarize the assessment results. A narrative summary is required. Charts, tables or graphs are encouraged but optional. The 14 traditional students taking the assessment had a mean score of 8.21 and a standard deviation of 2.45. The 17 dual credit students had a mean score of 6.06 with a standard deviation of 3.38. A two sample t-test of the claim that the Dual Credit students score at least as well as the traditional students yields a p-value of 0.025. There is suffieient evidence to reject the claim.
*3). **INTERPRETATION*** *- Discuss how the results answer the assessment question(s).* The data indicate that students in the dual credit courses are doing well on the material being assessed.
4). Observations made that were not directly related to the question(s). (*i.e. interrater reliability of the scoring tool was low*) none
5). ***How did the outcomes of the traditional and alternative format analysis compare*?** The data indicated that there is a statistically significant difference between the performance of dual credit and traditional students. One of the dual credit instructors indicated their students came into the class without the proper background and it was reflected in the results.

Sharing of Results: *When were results shared? Date:* 6/16/26 *How were the results shared? (i.e. met as a department)* email *Who were results shared with? (List names):* Ed Reinke, Brian Albright, Kent Einspahr, Marcus Gubanyi, Tim Schroeder

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?* no specific action will be taken at this time
2. **IMPACT*-** *What is the anticipated impact of the* **ACTION*** *on student achievement of the learning outcome in the next academic year?* none
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). none

Submitted by: Edward Reinke **Assessment Committee Reviewed (date):** 6/16/26

Submitter notified approval/additional action needed: 6/16/26
BUDGET IMPLICATIONS – Assessment Committee Chair notified appropriate Dean: na