## 2020 - 21 Departmental Assessment Plan

Department/Program/Unit: Business and Mathematics Date: 10/23/20

Related: University Goals/Outcomes: Knowledge Select Select Select

Members involved with development of Plan: A. Langewisch, E. Reinke, B. Albright

**Departmental/Program/Unit Student Outcome:** What student outcome from the departmental matrix will be assessed? (It is suggested that you cut and paste directly from the matrix. Outcomes should represent the absolute priorities for learning- students must be able to do [this] when they finish our program).

State as follows: Students should be able to [action verb] [something].

Students should be able to communicate, in written form, technical mathematical concepts in a manner that is understandable to all audiences.

**Background**: What factors caused you to choose this particular assessment outcome? If you chose this outcome because of a perceived problem, please explain.

An essential skill of a mathematician is to be able to write proofs.

**Question**: What specific question(s) are you attempting to answer through assessing this student outcome? (What are you trying to find out? There may be more than one question, but no more than three.) Are students able to effectively communicate a correct mathematical argument?

## Methodology:

- 1. OBJECT\* What data (i.e. artifact, exam score, detailed description of assignment) will be collected? The data will be contained in an exam for Math 252.
  - a. How does this data address the assessment question? The entire exam will consists of 9 proofs.
    i. Include/attach a description/example of assessment tool to be used.
- **2.** How will data be collected? The data will be collected through the administration of an in class exam given during the course of the semester.

## **Analysis of Artifacts:** PERFORMANCE CRITERIA\* - Discuss:

- 1) How the artifacts will be analyzed (attach rubrics/scoring tools if used): A four-point rubric will be applied to each of the outcomes. The four categories are Exceeds Expectations, Meets Expectations, Needs Improvement, and Unacceptable.
- 2) How you will know if it is good (i.e. score required by % of students): At least 80% of students will achieve a level of Meets Expectations or Exceeds Expectations.

Submitted by: Langewisch Date: 10/29/2020 Assessment Committee Reviewed (Date):

10/30/2020

Department Chair notified of approval/or additional action needed: Approved 10/30/2020