

**2022- 23 & 2023 - 24 General Education Assessment Plan**

**Department: Math and Computer Science**

**Date:9/27/2022**

**General Education Committee has selected the following area for the 2022-23 & 2023 -24 assessment cycles:**  
**COMMUNICATION: to demonstrate effective communication skills for personal, academic and professional purposes.**

**General Education Committee: Background: What factors caused the committee to choose this particular assessment outcome?** The committee selected this outcome based upon the emphasis on developing a strong knowledge base in the general education curriculum.

**Department:** *What student outcome will the department assess that addresses: "The student will be able to demonstrate base level knowledge in the core discipline"?*

The student will be able to effectively communicate facts and results, using data to support their arguments.

**Department:** *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.*

1. Can students communicate complex technical content in understandable terms?
2. Can students incorporate data in communicating the results of their work?

**Methodology:**

1. **OBJECT\*** - *What data (i.e. artifact, exam score, detailed description of assignment) will be collected?* Jupyter Notebooks from Math 128 will be collected for one of the course projects.
  - a. *How does this data address the assessment question?* In the Jupyter Notebook, students write computer code to perform operations on data. In addition, students must explain the data, code, and results throughout the notebook. We will assess the explanation.
    - i. *Include/attach a description/example of assessment tool to be used.*
2. *How will data be collected?* 10 random student notebook files will be selected.

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

- 1) How the artifacts will be analyzed (attach rubrics/scoring tools if used): The department will assess the notebooks using the following 4-point scale:
  - 4 = complete, understandable explanation
  - 3 = explanation is missing minor points and/or is not fully clear
  - 2 = explanation is missing major points and/or includes inaccurate explanation
  - 1 = missing or mostly inaccurate explanation
- 2) How you will know if it is good (i.e. score required by % of students): Success criteria: >50% of students score 4 and >80% of students score 3 or 4.

**Submitted by: Marcus Gubanyi**

**Date: 9/27/2022**

**Assessment Committee Reviewed (Date): 11/1/22**

**Department Chair notified of approval/or additional action needed: Approved 11/1/22**