2022 – 23 Departmental Assessment Plan

Department/Program/Unit: Math and Computer Science Date: 9/27/2022
Related: University Goals/Outcomes: Communication Select Select
Members involved with development of Plan: Marcus Gubanyi, Kent Einspahr, Brian Albright, Ed Reinke
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 effectively communicate facts and results, using data to support their arguments and
focusing on key technical details.
Background: What factors caused you to choose this particular assessment outcome? If you chose this
outcome because of a perceived problem, please explain.
Communication skills are essential. We wish to verify that our programs adequately prepare students to
communicate in a professional and technical manner.
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.)
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?
In Math 475 and CS 391, instructors will collect student reports on their projects.
a. How does this data address the assessment question? By examining these reports, we will
assess students' ability to distill complex details into understandable terms.
i. Include/attach a description/example of assessment tool to be used.
2. How will data be collected? Instructors will sample up to 10 artifacts from each section.
Analysis of Artifacts: PERFORMANCE CRITERIA* - Discuss:
1) How the artifacts will be analyzed (attach rubrics/scoring tools if used): The department will assess
artifacts together, focusing on the students' explanation of mathematical models, technical content, etc.
Rubric for assessment will be 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