



Annual Assessment Report 2021-2022

MS Mathematics Mathematics & Statistics College of Science

CONTACT

Name of Program Assessment Lead Stacy Brown

Name of Person Completing Report Stacy Brown

DISCIPLINARY ACCREDITATION No

DEVELOPMENT AND DOCUMENTATION OF STUDENT LEARNING OUTCOMES

How were the program's SLOs developed? (select all that apply)

- ☐ We developed them as a program/department using our own knowledge and expertise of the field.

Other than the [CPP Catalog](#) and the [Office of Assessment and Program Review website](#), where else are your SLOs published? Select all that apply.

- ☐ Not currently published

ASSESSMENT ACTIVITIES IN 2021-2022

This section provides the opportunity for programs to share and discuss assessment activities conducted in **AY 2021-2022**. This includes data collection, rubric development, data analysis, discussion of findings, development or implementation of closing the loop improvement strategies, update of your assessment plan and/or curriculum matrix, etc.

How many total SLOs does your program assess according to your assessment plan?

- ☐ 5

How many SLOs did your program assess this past year in 2021-2022?

- ☐ My program assessed SLOs in AY 2021-2022

Please list the SLOs examined

- SLO #1: SLO 5: Students will effectively interpret and justify technical ideas with written and oral skills.

Student Learning Outcome (SLO): SLO 5: Students will effectively interpret and justify technical ideas with written and oral skills.

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
<ul style="list-style-type: none"> Created/modified/discussed assessment procedures (e.g., SLOs, curriculum matrix, mechanism to collect student work, rubric, survey, etc.) 		
<ul style="list-style-type: none"> Collected direct evidence (e.g., student work, exam items, etc.) Scored direct evidence of student learning Interpreted and made meaning of findings for direct evidence 	<ul style="list-style-type: none"> Assignment/exam/paper completed as part of regular coursework Oral performance (e.g., presentation, defense, conference presentation etc) 	<ul style="list-style-type: none"> Used rubric or scoring guide
<ul style="list-style-type: none"> Collected indirect evidence of student learning (e.g., surveys, interviews, focus groups, etc.) Interpreted and made meaning of findings for indirect evidence 	<ul style="list-style-type: none"> Other, please explain: Faculty survey of oral communication practices 	
<ul style="list-style-type: none"> Discussed assessment results to make program decisions to improve SLO achievement (e.g., design new course, modify assignments, etc.) 		

Findings			
N of Artifacts	Criterion Used	Goal Met	Eye-opening Result
3-4	Percentage at a certain level	No	The assessment revealed the need for opportunities for students to engage in oral communication and develop oral communication skills.

IMPROVING THROUGH ASSESSMENT

Overall, what best describes how the program used the results in 2021-2022? Select all that apply.

- Assessment procedure changes (SLOs, curriculum matrix, rubrics, evidence collected, sampling, communications with faculty, etc.)
- Course-level changes (e.g., syllabus, content, pedagogy)
- Program curricular changes (e.g., course sequencing, changes to required curriculum, added or deleted courses)

Ideas to improve student learning can come from different constituents. With whom did the program discuss assessment planning and/or share results during AY 2021-2022? Select all that apply.

- Program/department faculty as whole
- A committee of program/department faculty
- Program/department assessment committee

The past academic year posed both challenges and opportunities. Please share any assessment discoveries (e.g., insights about assessment procedures, great achievements, etc.) regarding program assessment in 2021-2022 so that others may learn from your experiences.

Effort to collect oral communication data revealed to the committee and faculty that the MS program lacks appropriate oral communication opportunities. A follow-up survey that documented oral communication practices among faculty teaching the MS core, further supports the finding that students may progress through the program without engaging in oral communication practices, activities or assignments. The committee and department are discussing ways to rectify the lack of opportunity either through curricular changes at a course level or through the development of a new course. The next discussion is scheduled for October 19, 2022.

CPP's GI2025 goals What assessment-related efforts do you already implement, or would implement to support the campus' diversity, equity, and inclusion (DEI) efforts? (e.g., planned or current disaggregation of assessment data by race/ethnicity, etc.) Undergraduate programs may wish to refer to CPP's GI2025 goals. (Not Mandatory)

As noted in our BS report, there is extensive research linking oral communication practices to active learning, as well as correlations between active learning opportunities and student success among diverse student populations in STEM fields. The department's efforts to advance oral communication (and, therefore, active learning) represent one of the ways we are working to improve DEI in mathematics.

Does the program offer a certificate or credential (e.g., teaching credential)?

- No

The most current assessment plan and curriculum matrix we have on file for your program may be found [here](#). To ensure we have the most updated assessment plan and curriculum matrix for your program, and for posting on our website, please upload the following documents:

Assessment Plan

Yes

Curriculum Matrix

Yes