SUMMARY OF ASSESSMENT

College	Science
Department	Statistics and Biostatistics
Program	MS Biostatistics
Reporting for Academic Year	2024-2025

Program Learning Outcomes (PLO)

PROGRAM LEARNING OUTCOMES (PLOs)	
Students graduating with a <degree program> will be able to:	
PLO 1	Apply biostatistical methodology to data to (a) produce descriptive statistics, probability models, and visual displays (b) select probability distributions to implement statistical inference (estimation and hypothesis testing), and (c) critique biostatistical models for uncertainty, likelihood, modeling and error analysis at the Master's level.
PLO 2	Evaluate practical problems arising in biostatistics to select and formulate models for solutions using these methodologies.
PLO 3	Select and generate biostatistical software output and evaluate the results appropriately.
PLO 4	Derive basic theory, explain biostatistical concepts, and clearly communicate analytical results to others.

Program Learning Outcome(S) Assessed

For MS in Biostatistics

Year : 2024-2025	
1. Which PLO(s) to assess	PLO 4
2. Is it aligned to an ILO?	Yes
3. If yes, list ILO.	Communication
4. Course name and number	STAT 632 – Linear and Logistics Regression
5. SLO from course	Communicate statistical concepts clearly and appropriately to others.
6. Assessment activity	Written project report
7. Assessment Instrument	Departmental Rubric for written communication
8. How data will be reported	Quantitatively, proportions of students in each category from 1-5 (5 mastered)
9. Responsible person(s)	STAT 632 Instructor, Assessment Rep
10. Time (which semester(s))	Spring 2025
11. Ways of closing the loop	Included in end-of year report and internal assessment

Summary of Assessment Process

. **Instrument(s):**

A final exam from the STAT 632 class was used to assess the PLO4. Here we provide data from all students in the MS Biostatistics program that took STAT 632 in Spring 2025.

Sampling Procedure: We sample by gathering data from all Biostatistics students in the STAT 632 class.

Sample Characteristics: All MS Biostatistics students at, or near, to the end of their program were identified.

Data Collection: Final exam in the course which is a project.

Data Analysis: We currently utilize Google Sheets to incorporate the rubrics that were established for the outcomes, to analyze the data.

Summary of Assessment Results

Main Findings: **Main Findings:**

Frequencies of Rubric-Scores for Statistics MS 2024-2025.

Rubric Score	PLO 4
1	0
2	0
3	0
4	0
5	8 (100%)
Total	8

Recommendations for Program Improvement:

The sample size is small for the MS Biostatistics program and difficult to make generalizations.

Next Step(s) for Closing the Loop:
We will continue to monitor the evaluation of our PLO's to determine if additional advising or curricular changes need to be addressed. Now that the degree will become a concentration, the PLOs will change slightly.

Other Reflections: We have no additional reflections on assessment at this time.

Assessment Plans for Next Year

Most PLOs are the same and assessment will be for comparable courses.

Year 1: 2025-2026	
1. Which PLO(s) to assess	PLO 4
2. Is it aligned to an ILO?	Yes
3. If yes, list ILO.	Communication
4. Course name and number	STAT 632 – Linear and Logistics Regression
5. SLO from course	Communicate statistical concepts clearly and appropriately to others.
6. Assessment activity	Written project report
7. Assessment Instrument	Departmental Rubric for written communication
8. How data will be reported	Quantitatively, proportions of students in each category from 1-5 (5 mastered)
9. Responsible person(s)	STAT 632 Instructor, Assessment Rep
10. Time (which semester(s))	Spring 2019
11. Ways of closing the loop	Included in end-of year report and internal assessment